INDIAN LOGIC IN THE EARLY SCHOOLS.

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A STUDY OF THE NYĀYADARŚANA
IN ITS RELATION TO THE EARLY
LOGIC OF OTHER SCHOOLS

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Καινόν γε τοῦτο. λαμπάδια 'έχοντες διαδώσουσιν ἀλλήλοις ἁμιλλώμενοι. 'άξιον θεάσασθαι... Κὰι ξυνεσόμεθά τε πολλôις κὰι διαλεξόμεθα. ἀλλὰ μένετε.

—*Plato, Resp.*, 328 A.

PREFACE

THE present work is a dissertation approved by the University of Oxford for the degree of Doctor of Philosophy. It is narrower in its scope than Keith's *Indian Logic and Atomism*, in that it is specifically a study of Indian Logic (including epistemology), and does not, unless incidentally, deal with the physics and metaphysics of the *Nyāya* and *Vaiśeṣika* schools. It is narrower also in that it does not include an account of the later, or so-called 'modern' logic, but confines its survey to the period ending with Vācaspati Miśra's commentary in the middle of the ninth century A.D.

My intention was not to give a history of Indian Logic within this period, but to interpret Indian logical doctrine in its historical development. In view of the difficulty of interpreting the basic texts it seemed necessary to keep closely to the actual words of the writers; with the result that the exposition became very largely a string of translations of *loci classici* on logical topics.

References are made by page and line to the Vizianagram Sanskrit Series edition of the *Nyāyabhāṣya* (*Benares* 1896): the Bibliotheca Indica edition of the *Nyāyavārtika* (*Calcutta* 1907): the Vizianagram Sanskrit Series edition of the *Nyāyavārtikatātparyaṭīkā* (*Benares* 1898): the Bibliotheca Indica edition of Śabara's *Bhāṣya* on the *Mīmāṁsā* (*Calcutta* 1889): and the Vizianagram Sanskrit Series edition of Praśastapāda's *Bhāṣya* on the *Vaiśeṣika*, and Śrīdhara's *Nyāyakandalī* (*Benares* 1895). References to Kumārila's *Ślokavārtika* and Pārthasārathi Miśra's *Nyāyaratnākara* are to the section and verse, the edition used being the Chowkhamba Sanskrit Series edition (*Benares*, 1898-1899).

Some of these are pioneer editions, landmarks in bibliography. Within the space of ten years India rediscovered the logical classics of the ancient school, which before that were practically unknown, even in India itself, and among *paṇḍits*. All students of the *Nyāya* owe a very great debt to the distinguished Indian editors of these first editions; and to those European Sanskritists who realised the importance of getting the manuscripts edited. To the last of these latter, the late Arthur Venis, I am under a personal debt of discipleship which I cannot now repay. *Prīyantāṁ guravaḥ.*

The conditions of the possibility of this study have been principally provided by three writers on *Nyāya*: Dr. Gangānātha Jhā, Professor Keith, and the late Satis Candra Vidyābhūṣaṇa. Without Dr. Jhā's translation of the three basic works of the ancient *Nyāya*, I should probably never have begun to understand them. To Keith's *Indian Logic* I owe my first connected view of the subject, and the understanding of many things. Vidyābhūṣaṇa provided the indispensable detailed annals of the school, and an invaluable pioneer account of *Bauddha* logic.

I regret that I have altogether ignored *Jaina* logic. It may be that its earlier writings would throw light on the development of doctrine, besides adding much of logical interest. I have not had the time nor the courage to enter upon what would have led me far afield.

My thanks are due to the United Provinces Government for the grant of study leave which enabled me to carry out this work, and for generous assistance in the publication of it; to the United Provinces Government Press for their patience and courtesy in dealing with the difficulties of printing the book; and to my wife for assistance in compiling the Index.

ABBREVIATIONS USED IN CITING CERTAIN WORKS

J Bomb R A S.	Journal of the Bombay Branch of the Royal Asiatic Society
J. R A S.	Journal of the Royal Asiatic Society
J. R A S B	Journal of the Royal Asiatic Society of Bengal.
Jhā, PSPM	*The Prābhākara School of Pūrva Mīmāṁsā*, by Gaṅgānātha Jhā
Jhā, transl	Translation of the *Nyāya Sūtra*, *Nyāyabhāṣya*, and *Nyāyavārtika*, by Gaṅgānātha Jhā
Keith, ILA	*Indian Logic and Atomism*, by A B Keith
MS	*Mīmāṁsā Sūtra* of Jaimini
NBh	*Nyāyabhāṣya* of Vātsyāyana
NK	*Nyāyakandalī* of Śrīdhara Miśra
NRA	*Nyāyaratnākara* of Pārthasārathi Miśra.
NS	*Nyāya Sūtra* of Gautama
NV	*Nyāyavārtika* of Uddyotakara
NVT	*Nyāyavārtikatātparyaṭīkā* (briefly the *Tātparya*, of Vācaspati Miśra
NVTP	*Nyāyavārtikatātparyapariśuddhi* of Udayana (briefly, the *Pariśuddhi*).
PBh	The *Bhāṣya* of Praśastapāda on the *Vaiśeṣika* system.
Śl Vārt	*Ślokavārtika* of Kumārila Bhaṭṭa on the *tarkapāda* of the *Mīmāṁsā*.
SDS	*Sarvadarśanasaṁgraha* of Mādhava
TB	*Tarkabhāṣā* of Keśava Miśra
VS	*Vaiśeṣika Sūtra* of Kaṇāda.
Vidyābhūṣaṇa, HIL	*History of Indian Logic*, by S. C Vidyābhūṣaṇa
Do. MSIL	*Indian Logic Mediaeval School*, by S. C. Vidyābhūṣaṇa.

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INDIAN LOGIC IN THE EARLY SCHOOLS

HISTORICAL INTRODUCTION

Systematisation and redaction into *sūtras*—The *Nyāya-bhāṣya* of Vatsyāyana—Praśastapāda *Bhāṣya* and the *Pramāṇa-samuccaya* of Diṅnāga—Uddyotakara and Dharmakīrti—Kumārila and Vācaspati Miśra

IT is no longer true that a history, in the sense of dated annals, is impossible for Indian Philosophy. Great progress has been made in the last thirty or forty years in the direction of evolving a chronological order out of a chaotic tradition. The origins remain misty: but the relative chronology of the earlier writers is now becoming apparent. and from 600 A.D an absolute chronology may be said to have been attained. The progress in the last respect may be illustrated by reminding sceptics that Fitzedward Hall's still valuable *Index to the Bibliography of the Hindu Philosophical Systems (Calcutta*, 1859) identifies Uddyotakara, whose date is now fixed about 600-650 A.D., with Udayana, who gives his own date as 984 A.D. Cowell cleared up this particular confusion in 1864, in his edition of Udayana's *Kusumāñjali.* Peterson in 1889 was still able to suggest that the Buddha himself was the author of the *Nyāyabindu*, which is in fact the work of Dharmakīrti, a near contemporary of Uddyotakara, as was shown by Pāthak in valuable papers contributed to the Bombay Branch of the Royal Asiatic Society from 1892,—papers which made a great advance in the determination of

the relative chronology of philosophical works. But to fix even a single date may be the work of a syndicate of scholars working in different continents and in languages as diverse as Chinese, Tibetan, and Sanskrit: and it is necessary therefore to hasten slowly.

SECTION 1. SYSTEMATISATION AND REDACTION INTO SŪTRAS

The systems and the sūtras

Of the six Brahmanical systems of philosophy five make their first appearance in literature in the form of *sūtras*, that is, collections of brief texts or aphorisms each one of which stands for more than it says, but which are threads in a coherent whole of doctrine. It is clear that these collections of what may be called chapter-headings cannot be first things in the history of the school to which each belongs; but that each had been the possession of a school, added to and altered from time to time as new opponents and new points of view presented themselves; and that each had a history extending over periods of varying length prior to the final redaction or compilation in which we now have them. Therefore, as has been pointed out[1], there are two chronological problems, which must be kept distinct, in connection with the *sūtras*. One is as to the date of their redaction into the present form. The other is as to the date when the system finally redacted into these *sūtras* first began to exist in the shape of a body of doctrine which would have been recognisable as continuous with the doctrine taught in the *sūtras* as finally compiled. It is quite possible that a *sūtra* which we conclude to have been redacted at a rela-

[1] H. Ui *Vaiśeṣika Philosophy according to the Daśapadārthaśāstra*, pp. 11-12

tively late date (for example, the *Yogasūtra*) may none the less teach a doctrine which had existed in recognisably the same form for centuries before it was redacted. It is on the other hand possible that names which later applied to a specific school were used in an early period in a different or in a much more general sense[1]. This is undoubtedly the case with the terms *nyāya* and *tārkika*, which were later applied specifically to the *Nyāya* school, but in the earlier literature refer either to the *Mīmāṁsā* or else have a general meaning. In the case of the term *Sāṁkhya* (which had a very long history) it has been suggested[2] that the name was originally given to any speculative doctrine which professed to achieve salvation by way of knowledge (*jñāna-mārga*), as opposed to the doctrine of salvation by works,—of which *yoga* may have been a quite general appellation

[1]Pandits say that *Yogāḥ* (plural) was used as an early designation of the *Vaiśeṣika* school. I am indebted to Mr Kṣetreśacandra Chaṭṭopādhyāya, lecturer in Sanskrit in the Allahabad University, for drawing my attention to a passage in the *Nyāyabhāṣya* in which Vātsyāyana attributes to the *Yogāḥ* specifically *Nyāya-Vaiśeṣika* doctrines, notably that of the *asatkāryavāda* (*N. Bh* p. 38 l. 6, *on NS* I. i. 29). See his note on *A Peculiar Meaning of Yoga*, (published since this was written) in *JRAS*, *Oct.* 1927, *pp.* 854—858.

[2]Franklin Edgerton, *Sāṁkhya and Yoga in the Epic*, Am. Journal of Philology, 1924.

The *Sāṁkhya Kārikā* appears from Chinese sources to be the work of an earlier contemporary of Vasubandhu,—Vindhyavāsin, that is to say Īśvara Kṛṣṇa An account of perception referred to at *NV* p. 45 1 14 (*śrotrādivṛttir iti*) is called *Vārṣagaṇyasya lakṣaṇam* by Vācaspati Miśra at *NVT* p. 103 l. 10, and he is perhaps citing Vārṣagaṇya in the words *pañcānām khalv indriyāṇām arthākāreṇa pariṇatānām ālocanamātram vṛttir iṣyate.* (The terms are *Sāṁkhya-yoga*: but *ālocanamātra* figures in Praśastapāda's account). Vārṣagaṇya is a definitely historical figure, perhaps the first historical figure in the *Sāṁkhya-Yoga* tradition. We know the name of his work—the *ṣaṣṭitantra*—, and we have several references to and citations from him. See Keith *Sāṁkhya System* pp. 62-63, Woods YSP p. xx.

For 'Vindhyavāsin' see *Ślokavārtika*, *anumāna*, 143. The reference is not clear, but might be to *Sāṁkhya Kārikā* 5-6. But the equation Vindhyavāsin = Īśvara Kṛṣṇa is not established.

If then indications of the late redaction of a *sūtra* are not inconsistent with the early systematisation of the doctrine taught in the *sūtra*, it is also true that early mention of a name which subsequently designated one of the schools is not necessarily evidence that the school existed at the date of the work in which the name is mentioned.

Relation of sūtras to Buddhist schools

Jacobi in his article on the *Dates of the Philosophical Sūtras*[1] confines himself to the question of the period at which the *sūtras* were redacted, and relies principally on the passages in certain of the *sūtras* and earliest commentators which are directed against Buddhist doctrines. Stcherbatsky[2] had used the same criterion, but (relying on the interpretation given by such later commentators as Vācaspati Miśra, Kumārila, and Śaṁkara) argued that the polemic is directed against the idealist or *vijñānavāda* school of Buddhist philosophy, and that, as this doctrine was developed by Asaṅga and Vasubandhu, the *sūtras* in which this polemic is found could not be earlier than the date of these Buddhist writers. Jacobi showed effectively that the passages in question do not polemise against the idealistic doctrine of these thinkers, but can be interpreted as attacking the earlier nihilistic

[1] *Journal of the American Oriental Society* xxxi, 1911.

[2] *Epistemology and Logic as taught by the Later Buddhists*, St Petersburg, 1909. This is in Russian; but a communication from Stcherbatsky summarising his arguments is embodied in Jacobi's article above referred to.—Stcherbatsky's work has now been translated into German by Otto Strauss, Neubiberg, 1924 The translation contains an appendix contributed by Stcherbatsky in which he admits that the view put forward by him in 1909 can no longer be maintained. See next note.

or *śūnyavāda* doctrine; and Stcherbatsky has recently[1] admitted the correctness of Jacobi's conclusions, though still interpreting the *Nyayasūtra* as arguing against idealism of an early type[2].

The *terminus a quo* for the redaction of the *Nyāyasūtra* and, the *Vedāntasūtra*, and for the early *Mīmāṁsaka* commentator—the '*vṛttikāra*'—whose polemic against the Buddhist doctrine is cited in Sabara's *Bhāṣya* on the *Mīmāṁsā Sūtra*, can therefore be pushed back to the period (sometimes identified with the time of Nāgārjuna) when the *Śūnyavāda* philosophy developed. Two of the *sūtras*,—the *Mīmāṁsa* and the *Vaiśeṣika*—, do not polemise against Buddhism, so that their date cannot be determined by this criterion. The *Sāṁkhyasūtra* is admittedly a modern compilation, and plainly polemises against the developed *vijñānavāda*. The *Yogasūtra* (iv 14—21) is said by Haughton Woods[3] to attack the idealism of the *vijñānavāda*: and it is plain that the *Bhāṣya* has the *vijñānavāda* in view. Woods relies on this, and on Vācaspati's explicit reference to a *vijñānavādin vaināśika*. But he admits that the *sūtra* itself does not make reference to this or any other school. But if we are to rely on commentators' interpretations we should have to admit that the *Nyāyasūtra* and the *Vedāntasūtra* are polemising against the *vijñānavāda*: and Jacobi's arguments against this view are cogent[4].

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[1]In his *Addendum* to Chapter I of his *Epistemology and Logic of the Later Buddhists*, contributed to the German translation of that work (*Erkenntnistheorie und Logik nach der Lehre der späteren Buddhisten · übersetzt von Otto Strauss : München-Neubiberg*, 1924, pp. 259—266).

[2]For his present views see below, pp. 29—31.

[3]James Haughton Woods *Yoga System of Patañjali*, pp. xvii-xviii. He says: "the fact remains that the *Sūtra* is attacking some idealist". The fact, I think, is that the *Yogasūtra* is here attacking the idealistic moment which, as I have argued below, was an element in the *śūnyavāda*, from the first.

[4]Jacobi himself however holds that the *Yogasūtra* passage is more easily interpreted if a reference to *vijñānavāda* is supposed. But the

Vidyābhūṣaṇa[1] has pointed out striking parallels in phraseology between Nāgārjuna's *Mādhyamika-sūtra* and the *Nyāya-sūtra*, which (as he supposes) show that the *Nyāya-sūtra* was redacted after the time of that writer. If this is so, the *Nyāyasūtra* in its present form falls in the period between Nāgārjuna and Vasubandhu[2].

Relations between the different sūtras.

It is sometimes held that the *sūtras* (other than the *Yoga* and *Sāmkhya*) must have been redacted at the same period, as they show traces of mutual influence. But intercourse between the schools in the long period preceding the redactions is perhaps sufficient to explain this: and there are indications that the *Vaiśeṣika*, at any rate, was redacted at a comparatively early period.

Nyāya and Vaiśeṣika

It contains no polemic against Buddhism, which it could hardly have ignored if it had been reduced to its present form after the rise of the Buddhist philo sophical schools[3]. Again the doctrine which it teaches owes nothing to the *Nyāya*, whereas the *Nyāya sūtra* reproduces the physiology and physics of the *Vaiśeṣika-sūtra*, in some cases repeating actual phrases from the latter in a way which proves indebted-

supposition does not seem necessary, and other arguments which he adduces for a relatively late date (450 A.D) for the redaction of the *Yogasūtra* are perhaps not conclusive. His argument is however cogent against the late tradition which identifies the author of the *Yogasūtra* with the author of the *Mahābhāṣya*.

[1] Vidyābhūṣana, *History of Indian Logic*, pp 46-47: *Nyāyasūtra of Gotama* p. x. Parallelisms with one or two lines in the *Laṅkāvatāra* which he points out are, as I argue below, of no value as evidence.

[2] Keith, *Indian Logic and Atomism*, pp. 22—25.

[3] The same consideration might be thought to prove an early date for the *Mīmāṁsā Sūtra*. But absence of reference to the *Bauddha* schools here could be explained by the fact that the *Mīmāṁsā Sūtra* is not a system of philosophy, but of exegetics. MS I 1 5 refers by name to Bādarāyaṇa, the reputed author of the *Vedānta Sūtra*: though this in itself proves nothing.

ness[1]. Had the *Vaiśeṣika-sūtra* been redacted later than the period of the systematisation of the *Nyāya*, it might have been expected to show some trace of *Nyāya* influence in its logic. But—though *Vaiśeṣika* logic is a more developed doctrine in the *sūtra* than is sometimes supposed—it shows no trace of *Nyāya*

— - - —— which he ird *adhyāya* of NS, which summarises *Vaiśeṣika* physics and physiology in the course of an argument to prove that the soul is other than the body, the senses, and the 'mind'— *VS* IV i 8 is identical with *NS* III 1 39 (*anekadravyasamavāyād rūpaviśeṣāc ca rūpopalabdhiḥ*—a doctrine typically *Vaiśeṣika*).—Ui's other parallels are :—

NS	II	i	54 = *VS*	VII.	ii	20
NS	III.	i.	28 = *VS*	IV.	ii	3
NS	III	i	35 = *VS*	IV	i	6—13.
NS	III.	i	63 = *VS*	II	i.	4-5.
NS	III.	i	71 = *VS*	VIII.	ii.	5.
NS	III.	ii.	63 = *VS*	VII	i	23
NS	I.	i	10 = *VS*	III	ii.	4.

In view of such parallelisms it is fair to say that the 'syncretism' of the *Nyāya-Vaiśeṣika* begins with the *Nyāya sūtra* itself Vātsyāyana regarded the two *sūtras* as complementary

VS VII ii 20 says *sāmayikaḥ śabdād arthapratyayaḥ* *NS* II. i 54 says *na, sāmayikatvāc chabdārtha-sampratyayasya* The parallelism here is, as Ui rightly claims, "not doubtful".

The rather curious phrase *bhūyastvād* in *NS* III. i 71 must be repeated from *VS* VIII ii 5 (The *sūtra* in the Vizianagram edn is III. i 69) *NS* III i 63 (i e 61-62 in the Viz edn) very neatly sums up the *Vaiśeṣika* doctrine of the special objects of the senses *NS* I i, 10 is a simplified version of the doctrine that the soul is inferrible from psychical qualities, omitting the philosophically dubious first part of *VS* III. ii 4 with this omission the two *sūtras* become identical. *NS* III. i 28 repeats the teaching of *VS* IV ii. 2-3 that the body is composed, not of many elements, but of one, viz earth. *NS* III i 35 is obscure but is interpreted by Vātsyāyana as stating the doctrine that perception is limited to things which have magnitude and 'manifest form',—the doctrine taught by *VS* IV. i. 6—13. *NS* III. ii 63 (=62 in Viz edn) teaches that 'mind' is atomic for the reason given in III ii 60 (=59) i.e. that we cannot have more than one apprehension at a time while *VS* VII. i. 23 says that 'mind' is atomic because it is not all-pervading (*vibhu*) like ether and the soul

A striking likeness to the *Vaiśeṣika* which Ui does not note is in *NS* V i 14, which teaches the characteristic *Vaiśeṣika* doctrine that the universal (*sāmānya*) is eternal and perceptible by sense (*aindriyakatva*) —On the other hand *NS* II ii 65-66 shows no trace of the *Vaiśeṣika* doctrine of the universal and of *Vaiśeṣika* terminology, though *Vātsyāyana* in his comment *ad loc* plainly echoes the terminology of the *Vaiśeṣika Sūtra* (e.g., *anekatra pratyayānuvṛttinimittam*).

The indication here is that *NS* II.ii.65-66 is teaching a *pre-Vaiśeṣika* doctrine of the universal, while *NS* V i 14 is teaching a *post-Vaiśeṣika* doctrine

influence. It seems certain that the *Vaiśeṣika*, both as a system and as a *sūtra*, is earlier than the *Nyāya*.

Nyāya and Mīmāṁsā

Keith points out that the *Nyāyasūtra* shows acquaintance with *Mīmāṁsaka* terminology in the passage of the second book which deals with knowledge derived from words and the authority of the Veda (*NS* II. i. 49—69), and which asserts against the *Mīmāṁsaka* the doctrines that words have meaning by convention and that the *Veda* had an author. There is no question that the two doctrines here controverted, and the doctrine of the eternity of ' word ', existed prior to the redaction of the *Nyāya* and *Vaiśeṣika sūtra;* and it seems probable that the terminology of exegesis which we find in the *Mīmāṁsā sūtra*—together with these doctrines—are older than any of the philosophical schools. But no indication as to the date of redaction of the *Mīmāṁsā sūtra* can be drawn from the *Nyāya* and *Vaiśeṣika* polemic. There is nothing however to prevent us from assigning an early date to the *Mīmāṁsā sūtras*, even in the form in which we now have them, so far as I know. The only consideration to the contrary is the absence of reference to the system and its author in the *Mahābhārata*: and not much weight can be attached to the argument from silence here[1].

Nyāya and Vedānta

The relation between the *Nyāya-sūtra* and the *Vedānta-sūtra* may become clearer when a careful comparison shall have been made between the polemical passages in the two *sūtras*[2]. Keith states

[1] See Keith, *Karma-Mīmāṁsā*, pp. 5—7.

[2] *Vedāntā-sūtra*, first and second *pādas* of the second *adhyāya*: *Nyāyā-sūtra*, *adhyāya* III, and IV.

that Gautama is familiar with the terminology of the *Vedānta-sūtra*[1], and he finds in the *Vaiśeṣika-sūtra* references to the teachings, and reminiscences of the phraseology, of the *Vedānta-sūtra*[2]. On the other hand the *Vedānta-sūtra* has a definite polemic against views found in the *Vaiśeṣika-sūtra*[3]: and Jacobi has shown that its polemic against the *Bauddha* corresponds to the polemic in the *Nyāya-sūtra*[4], neither being directed against the later *vijñānavāda* doctrine; while the *Vaiśeṣika-sūtra* contains no such polemic. The indications seem to be that the *Vaiśeṣika-sūtra* is earlier than the *Vedānta-sūtra*, as it is earlier than the *Nyāya-sūtra*: while the two latter *sūtras* may have assumed their present form at about the same period.

Origins of the Nyāya

When did the *Nyāya* doctrine begin to exist in a form recognisably continuous with the doctrine as we have it in the *Nyāya-sūtra?* In other words, what is its systematisation-period, as distinguished from its redaction-date? In order to clear the ground for this enquiry it is first necessary to ask what is specially *Naiyāyika* in the *Nyāya* doctrine. For its physics and physiology and psychology are not specifically its own, being from the first indistinguishable from those of its sister-*śāstra*, the *Vaiśeṣika*. What

[1]Keith, *ILA*, p. 25. The only parallel he gives is *NS* III. ii. 14—16 = *Ved. S.* II. i 24 But this is only the 'stock example' of curds arising from milk, and does not amount to evidence. The *Bhagavadgītā* 13.5, 15.15, speaks of a *brahma-sūtra* and *vedānta-kṛt*.

[2]*op. cit.* p. 24. "Kaṇāda declares that the soul is not proved by scripture alone, that the body is not compounded of three or five elements, and his use of *avidyā* 'ignorance', and *pratyagātman* 'individual self' is reminiscent of the *Brahma Sūtra* ".—The terminology and the doctrines mentioned may well be earlier than the *Vedānta Sūtra*.

[3]*Ved. S* 2. 2 17 is a sneer at the *Vaiśeṣika*, not at the *Nyāya*.

[4]See footnote 1 p. 93 *infra*.

characterises it specifically appears to be primarily its development of the '*nyāya*' or five-membered method of demonstration: and, in connection with this, its insistence on *four* sources of knowledge. corresponding to the first four members of its demonstrative formula, or 'syllogism'. The emphasis which it laid on the independent status of testimony as a means of proof made it in theory more 'orthodox' than the *Vaiśeṣika*, which nominally recognised only perception and inference as sources of knowledge· and, though in practice the difference was small, this may have been the decisive advantage which enabled the younger *śāstra* to supplant, as it did, the elder: of which it may perhaps fairly be called a revised version. The importance of the *Nyāya* therefore is in its doctrine of the *pramāṇas*, or sources of proof, and in its formulation of the *nyāya*. or method of demonstration, from which it took its name. It is therefore correct to regard the *Nyāya* as, above all else, a school of logic.

The question then amounts to this. When does logic, as taught in the *Nyāya-sūtra*, first make its appearance? There is a reference in the *Mahābhārata* which is quite definite :—

pañcāvayavayuktasya vākyasya guṇadoṣavit[1].

"Knowing the virtues and defects of the five-membered syllogism." It is not possible to doubt[2] that we have here a reference to the specific *Nyāya* doctrine

[1]Quoted by Vidyābhūṣaṇa in his *Nyāya Sūtra of Gotama*, p xvi. The reference is *Mahābhārata*, *sabhāparva*, *adhyāya* 5 (ii v. 5) The same passage has a reference to the Romans, which suggests a late date

[2]Vidyābhūṣaṇa cites several other passages from the *Mahābhārata* which refer to a *tarkaśāstra*, *tarkavidyā*, *hetuśāstra*, *ānvīkṣikī nyāyaśikṣā*, etc. But in none of these can we be quite sure that the reference is to our *Nyāya* system. The reference may be to rationalising and sceptical methods such as certainly existed in very early times.—Manu in one place excommunicates the twice-born sceptic and critic of the *veda* who from reliance on '*hetuśāstra*' despises *śruti* and *smṛti* · and Kullūka Bhaṭṭa explains this as a reference

of demonstration. But it does not help us to carry the date of the system any further back, seeing that the present redaction of the *Mahābhārata* may be as late as 200 A.D.

In the medical works of Suśruta and Caraka, and in the *Arthaśāstra* attributed to Kauṭilya, there are lists of *tantrayukti*, that is to say methodological technical terms used in the particular *tantra* or *śāstra* : and one of these,—the *tantrayukti* of *anumata*, i.e., the principle of tacit acceptance, 'what is not denied is admitted'—is quoted and used by Vātsyāyana[1]. The names of some of the *tantrayukti* figure in the terminology of the *Nyāya*[2] : but the accounts given in the lists themselves do not tally with the meanings which the *Nyāya* assigns to the terms, and the lists are clearly independent of the *Nyāya*. There is no trace of system underlying these collections of more or less technical terms, and nothing of logic in them. —There is however a section in Caraka's work devoted

to *Cārvāka* and other sceptics (Manu II. 11). In other places he insists on the use of *tarka*—not conflicting with *veda* and *dharmaśāstra*—as essential (XII. 106), enjoins the study of *ānvīkṣikī ātmavidyā* on a king (VII 43), and says that *haitukas tarkī* should be among the members of a *pariṣad* (XII 111) None of these passages need refer to the logic of the *Nyāya sūtra* · although Vātsyāyana seems to refer to *Manusmṛti* VII 43 when he claims that the *Nyāya* is *ānvīkṣikī ātmavidyā* (*N. Bh* p 7 1 4)—A passage in Kauṭilya's *Arthaśāstra* throws together under the name of *ānvīkṣikī* the *Yoga*, *Sāṁkhya*, and *Lokāyata*.

[1]*NBh* p 16 1 9 *paramatam apratiṣiddham anumatam iti hi tantrayuktiḥ* Vidyābhūṣaṇa, *HIL pp* 24—26

[2]e g *prayojana*, *saṁśaya*, *nirṇaya*, *padārtha*, *upamāna*, *arthāpatti*, *prasanga*, *ekānta* and *anekānta*, *hetvartha*, *apadeśa*, *uddeśa*, *nidarśana*, *viparyaya*.

Each list gives definition with examples Suśruta's examples are taken from medicine, Kauṭilya's from his own *śāstra*. The lists do not agree in the meanings attached to the technicalities in all cases. Thus Suśruta says *anena kāraṇenety apadeśah—Yathāpadiśyate madhurena na śleṣmā 'bhivardhate*. Kauṭilya says *evam asāv āha ity apadeśah* · and he illustrates it by a quotation ending *iti Kauṭilyah*. See Suśruta, *uttaratantra* 65, Caraka, *siddhisthāna*, 12, *Kauṭilya arthaśāstra* 15*th adhikaraṇa of* 1*st adhyāya* (Mysore edn. p. 424).

to strictly logical conceptions, the teaching of which perhaps represents a popular version of the *Nyāya*, divested of all subtleties and adapted to the understanding of the layman[1]. But here again the date of Caraka's work in its present form is so uncertain that the passage does not help towards fixing the systematisation-period of the *Nyāya*. The same may be said of a supposed reference to the *Nyāya* in the *Milindapañha*, where King Milinda (Menander of Bactria, c. 150 B.C.) is said to have been versed in *Sāṁkhya*, *Yoga*[2], *Nīti*, *and Vaiśeṣika*. *Nīti*, in the context, *may* mean *Nyāya*; though the use of the word in this sense is perhaps without a parallel.

In the older literature, that is, in works to which a date definitely prior to the Christian era can be assigned, there is complete absence of reference to the *Nyāya* as a system, though the word *nyāya* occurs either in the general sense of a decision

[1] Vidyābhūṣaṇa's suggestion that it embodies "the principal doctrines of *Ānvīkṣikī*, possibly as propounded by Medhātithi Gautama" has nothing to recommend it (*HIL* p. 25 Vidyābhūṣaṇa distinguishes two authors of *Nyāya* doctrine—Gautama and Akṣapāda—the latter much later than the former). Vidyābhūṣaṇa holds that Medhātithi was another name for Gautama (or Gotama). But the only grounds for this assertion would seem to be the mention in the *Mahābhārata* (*Śāntiparvan*, 265) of a *Medhātithir mahāprajño Gautamas tapasī*, and the reference in Bhāsa's *Pratimā* (p. 79) to a *Medhātither Nyāyaśāstram*. There is nothing to show that the *Mahabhārata* sage had any connection with the legendary founder of the *Nyāya* · and Bhāsa's reference, according to Barnett (*Bulletin of the London School of Oriental Studies*, 1924, p. 520) is to a late *Manubhāṣya* by an author named *Medhātithi*. See also F. W. Thomas in *JRAS*, 1925, p. 107.

[2] See note 1 to page 3, above. *Yoga* cannot mean *Vaiśeṣika* here, seeing that *Vaiśeṣika* is separately mentioned.—There seems to be no reason to take *nīti* in any other than the usual sense of *nīti-śastra*. *Sāṁkhya* and *yoga* here may have the wider significance which Edgerton would give to the terms see note 2 to page 3, above. The passage would then refer to the doctrine of salvation by knowledge, the doctrine of salvation by works, the science of government, and the *Vaiśeṣika* philosophy. That is, of the philosophical systems *as we now have them*, it *refers to one only*. This supports the view above suggested as to the priority of the *Vaiśeṣika* to the other (developed) systems. If the author of the *Milinda-pañha* had known the *Nyāya* there would have been some trace of its logical method in the work.

or conclusion, or in the special sense of *Mīmāṁsā* principles[1]. The Buddhist Pali Canon gives the impression of belonging to a pre-logical phase of thought: and this is true even of the *Kathāvatthu*, in which we find some terms which are familiar as technicalities of the *Nyāya* system, e.g. *pratijñā*, *upanaya*, *nigraha*, *nigamana*, *upamā*. It cannot be said that these are not used as technical terms, for their application is systematic[2]: but they are not technical terms of syllogistic analysis. They are used in connection with a stereotyped scheme of discussion which is applied with wearisome iteration to a variety of topics. The debate has in the first instance five phases: each phase is an argument in itself: and the fourth and fifth phases are called respectively the *upanaya* and the *nigamana*. The first phase is called *anuloma*, the second *pratikarma* (*paṭikamma*), and the third *nigraha*. The five phases together constitute the first *nigraha*. Then follows a second *nigraha*; with five similar phases except that the first phase is now *pratyanīka* (*paccanīka*) instead of *anuloma*. Six other '*nigrahas*' follow, in two sets of three: the first set of three being modifications of the first *nigraha* by insertion of the words 'everywhere,' 'always', 'in all cases': the second set of three being corresponding modifications of the second *nigraha*. These eight *nigrahas* appear to constitute a dialectical whole (*K V* I i. 1—16): a five-phased argument *pro*,

[1] Keith, *ILA*, pp. 10-11

[2] Keith in *ILA* pp. 13-14 speaks of these as terms "which later in Gautama's logic are technical terms, but which at this period have their more general sense": but in his *Buddhist Philosophy* pp. 303-4 he writes in this connection "we may suppose a contemporary logic, but nothing of it is said". Vidyābhūṣaṇa, *HIL* pp 234—240, gives a sample of the *Kathāvatthu* method of disputation in connection with which these terms are used.—The *Kathāvatthu* has been translated under the title *Points of Controversy* (Pali Text Society, 1915, edited in the same series of publications, 1894—7), and a note on its 'logic' by Aung is contributed to the preface.

a five-phased argument *contra*, three modes of the *pro* argument, and three modes of the *contra* argument[1].

There is method here—too much of it[2]—but it is in no way comparable to the method of the *Nyāya*. A truer parallel is to be found in the ten-membered debate (miscalled 'syllogism') as stereotyped by the *Jaina* logician *Bhadrabāhu*,[3] and probably in the ten-membered method which Vatsyāyana attributes to certain methodologists (*naiyāyika*). The *Kathāvatthu*, in fact, so far from proving that logic existed in the third century B.C.,[4] is an indication that it did not exist: for, if it had existed, this cumbrous methodology could hardly have remained in use. It further indicates that logic was preceded by attempts to schematise discussion, attempts which were inevitable in view of the habit of organised public discussion which prevailed in early India, but which could not succeed until the nerve of argument had been separated from the irrelevances in which the early methodology obscured it, and plainly exposed in a formulation of the syllogism[5]. When that was first done a genuine logical analysis began to exist. But there must have been a period of tentative groping after logical

[1]It is worth while to point out that the number of the phases in a *nigraha* corresponds to the number of members in the *Naiyāyika* syllogism, and that the *upanaya*-phase and *nigamana*-phase in the *nigraha* are fourth and fifth phases, just as the *upanaya* and *nigamana* are fourth and fifth members of the syllogism

[2]In virtue of its method the *Kathāvatthu* is insufferably tedious

[3]Vidyābhūṣaṇa, *HIL* pp. 166-167

[4]The date claimed by late Buddhist tradition for the *Kathāvatthu*

[5]It is of course a true observation of Locke that God did not make men barely two-legged animals and leave it to Aristotle (or Akṣapāda) to make them rational. Children and savages reason as well as logicians on matters that concern them But to do a thing is not to know how it is done Aristotle and Akṣapāda showed how reasoning is done; thereby teaching, not indeed how to reason, but how to argue The syllogism is not the universal form of reasoning · but it is the universal form of argument and its formulation marks the transition from a pre-logical to a logical method of argument. In other words it marks the transition from a stage of culture in which people can talk irrelevantly to a stage in which irrelevance is not tolerated Early argument is incredibly irrelevant and tautologous.

method before it was achieved. This period is marked by a work like the *Kathāvatthu*, which is claimed by later tradition to belong to the age of Aśoka, c. 250 B.C., and may be much later. Assuming that the Buddhist culture of the period was not inferior to contemporary Brahmanical culture,[1] we can assert that logic did not yet exist in India at the period of which the *Kathāvatthu* is representative: though some of the terms which afterwards became vehicles of genuinely logical conceptions were already being used systematically[2] in connection with a methodology which was not yet logical, and which may not unreasonably be thought to have been separated by several generations from the beginnings of logic proper. But by the time of Nāgārjuna (whose *Mādhyamika Kārikā* is a really powerful piece of dialectic) thought and discussion had been completely *logicised*: and he uses terms[3] which are definitely technical terms of logic proper. His date is still somewhat indefinite. Ui places him about 113-213 A.D., on a computation of dates given by Kumārajīva and his Chinese disciples[4]. Keith however, with Jacobi, assigns him to a date about 200 A.D., on the ground that

[1]It might be suggested that a vernacular sectarian literature like the Buddhist *Pāli* Canon was in fact provincial and representative of a lower stratum of contemporary culture.

[2]Other terms in the *Kathāvatthu* which are significant are: *lakṣaṇa yuktikathā* (discussion based on argument from the marks or properties of the thing); *vacanaśodhana* (clearing up the statement, which considers 'the extension of the subject in relation to its predicate'—*HIL* p. 238), *śuddhikasaṁśyandana*, and *upamāsaṁśyandana* (simple comparison and analogical comparison?) See *KV* I i 129 and 137, *HIL* 237 and 238

[3]e.g. the use of *sādhyasama* in *MK* IV 8-9. I am not sure whether the term is used here as the *Nyāya sūtra* uses it. The *Kārikās* are difficult to interpret and demand intensive study. But that it is a genuinely logical conception is certain.

[4]Ui, *VP*, p 43, Kumārajīva went to China in 401 A D and was the earliest translator into Chinese of the works of Nāgārjuna, Āryadeva, and others. He was the chief translator of the works of the *Śūnyavāda* (Ui, *VP*, p. 3 n. 2, and p. 42 n. 1).

"Āryadeva, who was apparently a younger contemporary, uses . . . the words *rāśi* and *vāraka*, showing therefore a knowledge of Greek astrology which can hardly be supposed to have reached India in this form before 200 A.D."[1]

This much may perhaps be taken as proved, that logic proper did not exist in India before 200 B.C.[2] and that it had come into existence by 200 A.D. somewhere between these dates the *Vaiśeṣika* and the *Nyāya* were systematised; the *Vaiśeṣika* being the earlier of the two. Ui[3] argues that the *Vaiśeṣika* cannot have been systematised before 300 B.C. or after 18 A.D. :—not before 300 B.C., because the *Kauṭilīya Arthaśāstra* includes only the *Sāṁkhya*, *Yoga*, and *Lokāyata* under philosophy' (*ānvīkṣikī*)[4] : and not after 18 A.D., because *Vaiśeṣika* doctrines were imported into Jainism in the sixth schism, of which the date is said to be 18 A.D.[5] The reasons given have been criticised on the ground that the *Kauṭilīya* is no authority for so early a period, and that the *Jaina* chronology and tradition is uncertain. And the mention of the *Vaiśesika* system in the *Mahāvibhāṣaśāstra* which is traditionally connected

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[1] Keith, *BP*, p. 229.

[2] The differences of opinion as to the chronology of the *Pāli* Buddhist Canon are such that it is almost useless to base any argument upon it. The date 200 B.C. is on the assumption that the *form* of the *Kathāvatthu* is representative of Aśokan culture.

[3] VP. 33—38 His argument (pp. 18—33) connecting the origins of the *Vaiśeṣika* with earlier speculations—they can hardly be called philosophies—is suggestive. Some of these 'lost philosophies' (so to speak) were probably fathered by Brahmanic tradition on the *Lokāyata* or *Cārvāka* school and some of them are possibly to be found in the strange assortment of doctrines reviewed in the first *āhnika* of the fourth *adhyāya* of the *Nyāya-sūtra*. See Gopinātha Kaviraj's introduction to Jhā's translation of the *Nyāya*, 8—12.

[4] In this Ui follows Oldenberg and Jacobi. Keith objects that the *Kauṭilīya* is probably a work of several centuries after Christ.—Even so, it clearly embodies much older matter, and this definition of *ānvīkṣikī* is a case in point. *Yoga* here might mean *Vaiśeṣika*. See p. 3 n. 1, above.

[5] The Jainas say that Rohagutta, the chief schismatic, is in fact the founder of the *Vaiśeṣika* system.

with Kaniṣka's Council in the first century A.D., and in Aśvaghosa's *Sūtrālaṁkāra*, would be more helpful if the dates of these works were more definite. The same may be said of the mention of the *Vaiśeṣika* in the *Milindapañha*[1]. Nevertheless the indications, such as they are, point to the beginning of the first century A.D. as the latest date for the systematisation of the *Vaiśeṣika*. It does not seem possible to arrive at any more definite conclusion than this. It seems likely that the *Vaiśeṣika* system had been systematised into a form very like that of the existing *sūtras* by about the beginning of the Christian era, and that its by no means undeveloped doctrine of inference and fallacy became the basis of the formulation of demonstration which is the specific achievement of the *Nyāya* school, somewhere between the beginning of the Christian era and the end of the second century after Christ.

But there is another strain in the *Nyāya* besides the *Vaiśeṣika*. The elaborate organon of logic and dialectic which it contains ends, as Aristotle's organon ends, with a book on *sophistici elenchi* (*jāti*, and *nigrahasthāna*). The school had to deal with an ingenious dialectic of sceptism which had its origin in early speculations[2], but achieved its most conspicuous form in the *śunyavāda* or nihilist doctrine of Buddhism: a doctrine which found its most perfect expression in the *Mādhyamika Sūtra* of *Nāgārjuna*, although he need not be thought to have been its first

[1]There is no trace of logical conceptions, as the *Nyāya* understands logic, in the *Milindapañha*. We may infer from it that at the time when the bulk of that work was written logic did not yet exist in India.

[2]See Ui, *VP*, pp. 22-23 and his footnote 2 to p. 23. One of the early speculators, Sañjaya Velaṭṭhi-putta says: "If you ask me whether there is another world—well, if I thought there were, I should say so. But I don't say so And I don't think it is thus or thus. And I don't think it is otherwise. And I don't deny it." (cited by Ui, *loc. cit.*, from *SBB* vol. ii, p. 71).

systematiser[1]. And, besides this, there was the early methodology of debate of the pre-logical period, with its stereotyped formulae of discussion—ten-membered '*nyāyas*' and the like—which preceded the *pañcāvayavavākya*, the five-membered syllogism of the *Nyāya*. The genuinely logical formulation of demonstration given in the *Nyāya* supplanted these cumbrous forms; but not without being influenced by them. There were historical, rather than logical, reasons for the fact that the *Naiyāyika* syllogism had five members: and the *Nyāya* certainly owes many of its technical terms to the early methodologists. But none the less the logic of the *Nyāya* is a new creation. With the *pañcāvayavavākya* India began to *argue* logically for the first time. The *Nyāya* can therefore justly claim to be an epoch-making work: or at least an epoch-marking work.

SECTION 2. THE NYĀYABHĀṢYA OF VĀTSYĀYANA

The earliest extant commentary on the *Nyāya-sūtra* is the *Bhāṣya* of Vātsyāyana, who is sometimes called Pakṣilasvāmin. As it does not reply to criticisms which we know that Vasubandhu brought against the *Nyāya-sūtra*, and as it is itself cited and criticised

[1] Keith, *BP*, p. 230 "We need not, of course, take seriously the conception of Nāgārjuna as the creator of the *Śūnyavāda* philosophy" Therefore references to the *Śūnyavāda* in the *Nyāyasūtra* are not necessarily references to Nāgārjuna unless the phrases in *NS* which are parallel to phrases in *MK* first originated with Nāgārjuna. It is possible to regard them as 'tags' which are repeated by Nāgārjuna from earlier *Śunyavāda* writers: in which case Vidyābhūṣaṇa's argument for the priority of *Nāgārjuna* to the *NS* passages in question, and Jacobi's assumption that the date of Nāgārjuna gives the earliest limit for the composition of the *Nyāyasūtra*, fall to the ground Nagārjuna in his *Daśabhūmivibhāṣāśāstra* refers to the *Sāṁkhya*, *Yoga*, and *Vaiśeṣika*: but it is hardly safe to infer from this that the *Nyāya* as a system had not yet originated—for *Vaiśeṣika* doctrines are so similar to *Nyāya* that separate mention of the later may have been felt to be unnecessary. The question of the relation of Nāgārjuna to the *Nyāya* (a) as a system (b) as the present *sūtra*, must, it would seem, be left open still

by Vasubandhu's disciple Diṅnāga, it must be prior to both these Buddhist writers. It has been argued that it must be separated by a considerable period from the systematisation of the *Nyāya* because it gives alternative explanations which prove that the sense of the *sūtras* had already in some cases become obscure. And it speaks of the *sūtrakāra* as a *ṛṣi* (*NBh* p. 68 l. 7), which implies that the system had already succeeded in surrounding itself with the halo of a legendary antiquity: but this perhaps proves little, for no system could hope for a hearing without the fiction of antiquity: and therefore any system would be born old, so to speak. Another very interesting line of argument, first put forward by Windisch[1], has found general acceptance. It is based on the fact that there are embodied in the *Bhāṣya* certain *sūtra*-like 'sentences', on which the *Bhāṣya* comments, but yet which do not appear to have for the author of the *Bhāṣya* the status of *sūtras*, and are in general not classed as *sūtras* by the later commentators (though in particular cases there is difference of opinion). The view put forward by Windisch is that these 'sentences' are citations made by the *Bhāṣya* from an earlier commentary on the *sūtras*· which would imply a considerable interval of time between the *sūtras* and the *Bhāṣya*. But three considerations may be urged in this connection:

(1) There are in Uddyotakara's *Vārtika* and Praśastapāda's *Bhāṣya* a large number of passages which convey precisely the same impression as these 'sentences' in the *Nyāya-bhāsya*: that is to say, these works also contain statements of *sūtra*-like brevity which are then commented on or amplified by the text. It has not been suggested in the case of these two works that the preliminary brief statements are citations

[1] E. Windisch *über das Nyāyabhāṣya*, Leipzig, 1888.

from earlier commentaries. Of course they may be. But does it not seem more likely that we are here confronted with a trick of style, common to the older schools,—the trick or mannerism of first condensing a meaning into an aphorism, and then explaining it? The habit of commenting may be supposed to have become so engrained that a writer felt the need of a text to everything he wrote. This characteristic of '*Bhāṣyas*' is recognised by Indian tradition—"*Sūtrārtho varṇyate yatra padaiḥ sūtrānusāribhiḥ, svapadāni ca varṇyante, bhāṣyam bhāṣyavido viduḥ.*"

(2) The *Bhāṣya* never refers to an older commentator, and does not mark these 'sentences' as quotations with an *iti*. The *iti*,—where '*iti*' is used—follows the explanation, and not the 'sentence' explained. It is the *iti* which means 'that is to say': and which would be used by a writer amplifying even his own epigrams or apophthegms.—Of course it *may* be used to mark an explanation of some one else's apophthegms. But there is no need to suppose that this is so.

(3) On the other hand there is an obscure passage in which the author of the *Bhāṣya* himself draws attention to the relation between one of these 'sentences' and a *sūtra* which follows in the immediate context. The 'sentence' is the first of three embodied in the *Bhāṣya* on *NS*. II. i. 11, and runs:—UPALABDHIHETOR UPALABDHIVIṢAYASYA CĀRTHASYA PŪRVĀPARASAHABHĀVĀNIYAMĀD YATHĀRTHADARŚANAṀ VIBHĀGAVACANAM. This means that "as there is no fixed rule that processes of apprehension should in all cases precede, or in all cases follow, or in all cases be simultaneous with, the objects apprehended,

we assert precedence or sequence or simultaneity in any particular case according as experience shows this that or the other alternative to be true ". This is, as Vātsyāyana says, the solution (*samādhi*) of the difficulty put by the objector[1] (NS. II. i. 8—11). But it is not given at once *by the sūtrakāra*, who retorts, in *sūtra* 12, that the *Bauddha's* own proof will be exposed to just this dilemma; in *sūtra* 13, that if all proofs are invalid, the *Bauddha's* proof is invalid; and in *sūtra* 14, that if on the other hand the *Bauddha's* proof that all proofs are invalid is itself valid then it is not true that all proofs are invalid!— Then comes *sūtra* 15: TRAIKĀLYĀPRATISEDHAŚ CA ŚABDĀD ĀTODYASIDDHIVAT TATSIDDHEḤ—"and there is no denying the three time-relations, since this is established; as the musical instrument is established from its sound". Vātsyāyana explains this rather ambiguous *sūtra* as giving precisely the same solution of the difficulty as that given in the 'sentence' cited above and embodied in his comment on *sūtra* 11.—Why then are the 'sentence' and the *sūtra* given in different places? Vātsyāyana himself raises the difficulty: and the mere fact of his

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[1]The objector is a *Mādhyamika*, and he is arguing that the very notion of proof involves self-contradiction He puts forward a dilemma based on the three possible time-relations between *pramāna* (means of apprehension =*upalabdhihetu*) and *prameya* (apprehended object=*upalabdhiviṣaya*) If perception is supposed to exist *before* the percept, then perception cannot arise from contact with its object—for the object does not yet exist if *after*, then the supposed antecedent object cannot be identified with the percept—a percept being that which *is being* perceived if *simultaneously*, then we ought not to get successive apprehensions of the colour, scent, taste, etc of the object—since these are supposed to co-exist at one and the same time in the object (i.e. there should not be a subjective order of presentations different from the objective order of existences)—*Sūtra* 8 states the general nature of the dilemma · *pratyakṣādīnām aprāmāṇyaṁ traikalyāsiddheḥ* *Sūtras* 9, 10 and 11, state the three branches of this dilemma.

Vācaspati Miśra attributes the dialectic to the *Mādhyamika* at *NVT* p. 251 l. 1 and p. 249 l. 8. In the latter passage he gives an exposition of the *Mādhyamika* position, which is cited by Poussin in a note to p. 57 of his edition of the *Mādhyamika Kārikā* Poussin says · "*l'attitude des philosophes Bouddhiques est expliquée avec précision* ".

doing so has been taken to indicate that in his view the two statements stand on the same level[1]. He does not however seem to have treated the 'sentence' as a *sūtra*[2]. On the other hand it seems that he does not offer it merely as a part of the *Bhāṣya*, that is, as part of his own comment. Nor does

[1]Note to vol ii p 45 of Jhā's translation Dr. Jhā says that Vātsyāyana seems to imply that the 'sentence' and the *sūtra* "stand on the same level, *being the work of the same writer*". But had Vātsyāyana definitely thought of the 'sentence' as being *the words of Gautama* he would have included it in his *sūtrapātha*, which he does not seem to do—Dr. Jhā raises the general question of these 'sentences' in this note He postpones consideration of it to the Introduction. In the Introduction (contributed by Paṇḍit Gopīnātha Kavirāja) Windisch's view is accepted (p 13).

What Vātsyāyana says is · "Why is this said again? For the purpose of connection with what has been said before that is, in order that the statement made before to the effect that 'there is no fixed rule that processes of apprehension must precede, follow, or be simultaneous with, the apprehended object', might be understood to arise from the present statement". (The first clause may mean "Why again is this said?" And the phrase *taditahsamutthānam* is ambiguous in respect of the pronouns. Uddyotakara's paraphrase at *NV* p 194 is equally dubious) "The fact is that the *tēṣ* has in view the fact that there is no fixed rule, and so he here rejects the denial of the three time-relations—a denial grounded on the supposition that there is a fixed rule (*aniyamadarśī khalv ayam ṛṣir niyamena pratiṣedhaṁ pratyācaṣṭe*) . . He gives an illustration of one mode (of the three possible time-relations) in the words 'as a musical instrument from the sound'. Because this is intended as an illustration, the illustrations of the other two modes are to be supplied from what has been said before.—Why was that not stated here?—Because what has been said before is being explained. The meaning had to be cleared up some way or other,—whether it be cleared up here or there makes no difference".

It is difficult to get at the meaning of this passage Vācaspati Miśra says · "He puts an objection to the reading of this (*sūtra* 15), in the words 'why is this said?'. If he has on his own responsibility already stated the force of this *sūtra*, there is an end to a *sūtrapātha* altogether (i e there is no use in having *sūtras* at all, if we are going to anticipate the *sūtra's* meaning before the *sūtra* is stated) He replies that what was then said was not said by him as something over and above the *sūtra* (*utsūtram*), but was just the meaning of the *sūtra* itself and that his *sūtrapātha* is meant to show that this is the case." The *Vārtika* raises the question—why did he depart from the *sūtra-order* and give his comment in the previous passage. That is, why was not that comment given *here*, under *sūtra 15*? The Bhāṣya answers this in the words 'The meaning had to be interpreted some way or other—whether here or there is no matter'. This comment seems to indicate that in Vācaspati's view the 'sentence' is just a part of the *Bhāṣya*

See also p. 49, footnote 1.

[2]Dr. Jhā notes that the 'sentence' appears as a *sūtra* in the *sūtrapatha* attached to one of his MSS, and that the commentary *Bhāṣya-candra* appears to regard it as a *sūtra*. But Vācaspati Miśra's *Nyāyasūcīnibandha* does not give it as a *sūtra*, nor does Uddyotakara treat it as such.

the suggestion that these sentences are citations from an earlier commentator meet the special problem of this passage. In what sense then was it that the 'sentence' and the *sūtra* stood on the same level?

It seems to me that what Vātsyāyana says implies some such state of affairs as this.—He had to deal with a mass of material which formed the tradition of the school and which existed largely in *sūtra* form. There was already a doubt as to how much of this was to be called '*sūtra*' and treated as the very words of an already legendary founder. There were also differences of opinion as to the interpretation of some of these traditional formulae There is nothing to show that before Vātsyāyana's time there existed any standard *sūtrapātha* and commentary The two things go together · for it would be impossible to construct a *sūtrapātha* without at the same time giving an interpretation Others may have essayed the task of redaction and interpretation of the school tradition: indeed every teacher must have done it in some degree. But Vātsyāyana's work presents itself as the first standard redaction and interpretation: and there is nothing to show that anything except a relatively fluid tradition preceded him. There would be a certain amount of aphoristic tradition in the school which for one reason or another he would feel to be the meaning, though not the *ipsissima verba* of the *ṛṣi*. These he would exclude from his *sūtrapātha*. but include in his *Bhāṣya*: not as citations from any definite author, but as the heritage of the school and as carrying an authority only less than that of the *sūtras* themselves. Such appear to be some of the 'sentences' embodied in the *Bhāṣya*. And it is in this sense that some of the 'sentences' and the *sūtras* "stand on the same level",—not as being the work of the same writer; but as belonging to the same body

of tradition and as being no less representative of the *ṛṣi's* intention. That Vātsyāyana himself was the author of any of the *sūtras* seems highly improbable. But as a redactor he would have a certain latitude, and would be dealing with a body of teaching which had grown up over a considerable period of time and which included comparatively recent developments within the school. After one or two generations what was new would begin to be indistinguishable from what was old,—especially as any new argument would always be put forward as part of what the *ṛṣi* meant even if he did not say it: and the fact that he did not say it would very rapidly be lost sight of in a fluid tradition. There was probably little or no deliberate interpolation: and yet Vātsyāyana's redaction would embody as *sūtras* doctrines which had in fact entered the tradition of the school within only two or three generations of his own date. Some of these *sūtras* stand for teaching which arose in opposition to the *Mādhyamika* doctrine, and perhaps (though this is far from certain) in opposition to Nāgārjuna himself. If we suppose this teaching to have arisen even as late as 200. A D. there would be nothing to prevent Vātsyāyana from including it in his *sūtrapātha* about a hundred years later. So far then as this argument goes he could have done his work of redaction and comment as early as 300 A.D. And this date will allow for priority to Vasubandhu and Dinnāga, even if we place these teachers in the earliest period which has been assigned to them, namely, c. 350 and 400 A.D., respectively.

SECTION 8 PRAŚASTAPĀDABHĀṢYA AND THE PRAMĀṆA-SAMUCCAYA OF DIṄNĀGA

There is a period of upwards of three centuries between Vātsyāyana and the next *Naiyāyika* commentator, Uddyotakara. The interval saw a remarkable

development of logical doctrine which appears to have been due in part to the rise of a Buddhist school of logic and in part to the elaboration, by *Vaiśeṣika* commentators, of the comparatively simple logical conceptions embodied in the *Vaiśeṣika Sūtra*. The development was in the direction of a formal logic (as we should call it), and is characterised by the explicit formulation of a Canon of Syllogism, in the form of the *Trairūpya* or ' three characters ' of a valid middle term; and by a syllogistic, and a classification of fallacies, largely based on this canon. When logic passed into the hands of schools which recognised only two instruments of knowledge—perception and reasoning—instead of the four recognised by the *Nyāya* school, there ceased to be any real reason for retaining the first and fourth members of the five-membered *nyāya* or method of demonstration · for, as Vātsyayana teaches, the value of the first member is to lend *authority* to the demonstration, and of the fourth to contribute some (not very clearly conceived) *analogical* factor to the argument. Schools which rejected authority and analogy as independent means of proof would naturally find no function for the ' Proposition ' and the ' Application,' and would therefore tend to a three-membered syllogism. The logic of this period is not altogether consistent in this respect: it continued, for example, to recognise authority, in admitting False Proposition as an independent class of fallacy. And it did not altogether reject the five-membered syllogism, but contented itself with drawing a distinction between inference as drawn by oneself and inferential apprehension as conveyed to others. The latter retained the five-membered form. Finally, although the new doctrine formulated the third member of the *Naiyāyika* syllogism as a statement of inseparable connection between abstract

characters or universals (*avinābhāva*—the later *vyāpti*), with the order of the terms fixed according to a formula (*vidhi*) 'whatever is M is P, and whatever is not P is not M', it still retained the mention of examples (which are in fact an essential element in its formulation of the *trairūpya* or canon of syllogism), and it retained the old name 'exemplification' (*nidarśana*=*udāharaṇa*) for the third member of the syllogism; although this had in fact become a genuine 'major premise'.

Diṅnāga's *Pramāṇasamuccaya* and Praśastapāda's *Bhāṣya* on the *Vaiśeṣika* system are typical works of this period: and the relation between them has been the subject of long controversy. The former work is not extant in Sanskrit, and the fragments of it quoted by Vācaspati Miśra and others are not sufficient in themselves to settle the question of Diṅnāga's relation to *Vaiśeṣika* logic. Jacobi[1] took the view that Buddhist logic derives from *Vaiśeṣika*. Stcherbatsky[2] on the other hand argued that Praśastapāda borrowed his logic from Diṅnāga, and that he made rather disingenuous efforts to conceal his obligations. It is however clear that Diṅnāga, in his attack on the *Nyāya* had a predecessor in Vasubandhu, whose criticisms of *Naiyāyika* doctrines are several times cited by Uddyotakara, and who is known from Chinese sources to have written specifically logical works. It has also been held with much probability that Praśastapāda had predecessors in commenting on the *Vaiśeṣika* system: though of this no definite evidence is forthcoming. The question is further complicated by the fact that a work attributed to Diṅnāga by Tibetan tradition under the title *Nyāyapraveśa*, the teaching of which shows a similarity to the logic of Praśastapāda almost amounting to identity, is assigned

[1] *Indische Logik. Göttingen, Nachrichten, phil-hist.* pp. 458—482.

[2] in *le Muséon*, vol v, 1904.

by Chinese tradition to another writer,—Saṁkara Svāmin, said to be a disciple of Diṅnāga.

There is very close similarity between the logic of Praśastapāda and that of Diṅnāga. Diṅnāga's date shares the uncertainty attaching to that of his master Vasubandhu. He may fall anywhere between 400 and 500 A.D. Suali's opinion is that Diṅnāga and Praśastapāda are almost contemporaneous[1], and that Vātsyāyana preceded[2] both. That Diṅnāga[3] is later than Vātsyāyana is definitely proved—if any proof were needed —by the fact that the former writer ridicules the appeal to the methodological principle (*tantrayukti*) of tacit acceptance (*anumata*) as employed by Vātsyāyana in his commentary on *NS* I. i. 4. That Praśastapāda is later than Vātsyāyana becomes almost certain from a comparison of their logical doctrines[4], though no passage in the former work has yet been found which quite definitely refers to the latter.

Although Uddyotakara writes with constant reference to the logic of Diṅnāga, it is difficult to point to a passage in which he refers to the logic of Praśastapāda.

[1] Suali, *Introdusione allo studio della filosophia Indiana* (Pavia, 1913), p. 424. Cited by Faddegon, *Vaiśeṣika Philosophy* (Amsterdam 1918) p 16.

[2]Suali, p 31, cited by Faddegon, p 605 Bodas argued that Praśastapāda was earlier than Vātsyāyana, on the ground that the latter cites *VS* I i. 4, and that this *sūtra* is later than Praśastapāda But this is arbitrary. Faddegon's assumption that *VS* II. ii 22, which Praśastapāda cites, was interpolated from *Nyāya-bhāṣya* p. 34 l. 10 is equally arbitrary, and cannot be called a "decisive argument for Suali's opinion". But it seems certain that Vātsyāyana was earlier than Praśastapāda

[3]Diṅnāga refers to and criticises views very like Praśastapāda's. See Vidyābhūṣaṇa *HIL* p. 279; *fragment B of Diṅnāga*; Stcherbatsky, *Muséon*, v 170-171, cited by Keith *ILA* p. 27 footnote, who remarks "That Praśastapāda had predecessors is obvious, and it is from one of these doubtless that Diṅnāga borrows the passages". The admission that Praśastapāda had predecessors weakens Stcherbatsky's argument (1909) that Praśastapāda took his logic from Diṅnāga · it is possible that both he and Diṅnāga derived their common doctrines from these supposed *Vaiśeṣika* predecessors of Praśastapāda.

[4]e.g Praśastapāda's exposition of the notion of *sāmānyato dṛṣṭa* inference seems clearly to belong to a later phase of logical thought than Vātsyāyana's. The same is true of his formulation of syllogism.

It is easy to understand that he would tend to avoid reference in this connection : for nearly all the criticisms which he directs against Diṅnāga would be applicable to Praśastapāda : and therefore he could not refer to the latter, in connection with logical topics, without attacking the sister-*śāstra*. But no one occasion[1], at any rate, where it was possible to show that Praśastapāda was right and the Buddhist logic wrong, he makes an undoubted reference.

His references to Praśastapāda's physical and metaphysical doctrines are detailed and indubitable[2]. Indeed there are passages which must be read as commenting rather on Praśastapāda than on the *Nyāya*[3].

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[1]A passage in which Uddyotakara seems to contrast Praśastapāda's treatment of the topic of *pratijñābhāsa* with the Bauddha treatment of it, to the advantage of the former He says that 'sound is inaudible' is not a proper example of Proposition contradicted by Perception, whereas 'fire is not hot' *is* a proper example and again that a statement, on the part of a *Vaiśeṣika*, that sound is eternal, is not a proper example of Proposition contradicting Authority; whereas the statement 'a Brahman should drink spirit' *is* a proper example Now the two examples which he says are wrong are those given in the *Nyāyapraveśa* (see *Vidyabhūṣana*, *HIL* p 290-291), and the two examples which he says are right, are those given by Praśastapāda *PBh* p. 234). *NV* p 117, on *NS* I i 33

[2]See Keith *ILA* p 26 "He is clearly referred to both in connection with the atomic theory and logical doctrine by Uddyotakara" Keith cites in support Jacobi, *Encycl of Rel. and Eth*, I 201, and *Ind Log* 484.—Ui, p. 17 n 4, gives the following list of parallel passages —

NV p. 288 and *PBh* p 288 (on sound)

NV pp. 319-320 and *PBh* pp 11, 311 (*sāmānya*)

NV p 320 and *PBh* pp. 14, 324 (*samavāya*).

NV p. 468 *PBh* p 48 (*sṛṣṭi*)

NV p. 417 and *PBh* pp 106-107 (*rūpādīnāṁ pākajotpattiḥ*)

[3]For instance, *NV* pp 318—322 on *NS* II ii 61 is a defence of Praśastapāda's doctrine of *sāmānya* As examples of detailed correspondence compare —

NV p. 319 l. 3 *svaviṣaye sarvatra vartata iti sarvagatety ucyate.*
PBh p. 311 l. 13 *svaviṣayasarvagatam*
NV p. 319 l 5 *kva punar gotvaṁ vartate? yatra gotvanimitto 'nuvṛttapratyayo vartate*
PBh p. 311 l 16 *anuvṛttipratyayakāranam.*
NV p. 319 l. 16 *yathā vastracarmakambaleṣu nīlapratyayaḥ.*
PBh. p. 311 l 20 *yathā parasparaviśiṣṭeṣu carmavastrakambalādiṣv ekasmān nīladravyābhisaṁbandhān nīlaṁ nīlam iti pratyayānuvṛttiḥ* etc

That later commentators attributed high antiquity to Praśastapāda[1] is shown by the fact that Vācaspati Miśra cites his words (*PBh* p. 308 l. 5) as *pāramarṣavacana* (*NVT* p. 458 l. 8)[2]. *Praśastapādabhāṣya* was known to Dharmapāla (539—570 A.D.), and Paramārtha (499—569 A.D.)[3]. And there are said to be even earlier references to Praśastapāda in Buddhist writers, notably in Vasubandhu.

Stcherbatsky has recently[4] admitted that the views which he put forward fifteen years ago—views which were strongly grounded in the evidence then available—must be revised in the light of further knowledge. He now makes three points :

(1) idealistic tendencies showed themselves again and again in various contexts in the course of Buddhist philosophy;

(2) the *sūtras* of the *Nyāya* which seem to refer to the idealism of the *vijñānavāda* can be differently interpreted;

(3) we have positive proof of the existence of a systematic *Nyāya* and *Vaiśeṣika* long before Vasubandhu's time.

NV p 322 1 3 *katham tarhi gotvam goṣu vartate āśrayāśrayibhāvena. kaḥ punar āśrayāśrayibhāvaḥ? samavāyaḥ. tatra vṛttimad gotvam,—vṛttiḥ samavāya ihapratyayahetutvād ity uktam.*

PBh p 324, l 19 *ayutasiddhānām ādhāryādhārabhūtānām yah sambandha ihapratyayahetuḥ, sa samavāyaḥ.*

(*VS* VII ii 26 *ihedam iti yatah kāryakāraṇayoḥ, sa samavāyah.* Uddyotakara's phraseology however seems to echo Praśastapāda rather than the *sūtra* —For a later objection see Kumārila *Sl Vārt.*, *anumāna*, 100, cited below p 205).

[1]Vindhyeśvari Prasāda Dvivedin (Dube) in his preface to the Viz Skt. Series edn of *PBh* adduces other evidence to this effect

[2]I owe this reference to the list of identified quotations given by Gaṅgādhara Śāstrī Tailaṅga in his edition of the *NVT*. He gives one other citation from *PBh*., viz , *NVT* p. 81 l. 27=*PBh* p 259 l. 15 (definition of *sukha*).

[3]Ui, *VP*, pp. 74—79 and p. 18.

[4]*Erkenntnistheorie und Logik nach der Lehre der späteren Buddhisten* : übersetzt von Otto Strauss · München-Neubiberg, 1924. pp 259—266.

He still holds that Vātsyāyana in the introduction to *Nyāya-sūtra* IV 2.26 interprets the *sūtra* as referring to an idealist opponent,[1] and he accepts the supposed reference as the true interpretation of the *sūtra* : but he now believes the reference to be to an older idealism, and not to that of Vasubandhu. "The *Vijñānavāda* is as old as the *Śūnyavāda*, or perhaps considerably older". He therefore now accepts (though on different grounds) Jacobi's statement—"We are therefore almost certain that two *sūtras* at least, N. D. and V. D., preceded the origin of the *Vijñanavāda*, or rather its definite establishment",—the 'definite establishment' of the *Vijñānavāda* being understood to refer to the foundation of it on a logical basis by Vasubandhu.

In connection with his third point—"that the *Nyāya-Vaiśesika* system is considerably older than the later (epistemological) *vijñānavāda*", Stcherbatsky states that Vasubandhu himself deals with *Vaiśeṣika* views on the existence of the soul, and that he cites the definition of *saṁyoga*, not in the words of the *Vaiśeṣika sūtra* (III.ii.22), but in the phraseology of Praśastapāda (*PBh*. p. 139 l. 18 *aprāptayoḥ praptiḥ saṁyogaḥ*). He is not prepared to suggest that both Praśastapāda and Vasubandhu derive from an older source. He further cites Ui's statement (*Vaiśeṣika Philo-*

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[1] *NBh* p. 233 l. 6—*Yad idaṁ bhavān buddhīr āśritya buddhiviṣayā santīti manyate, mithyā buddhaya etāḥ*—"As for your (the *Naiyāyika's*) reliance on thought, and your (consequent) statement that the objects of thought exist,—the answer is that these thoughts are illusory". Stcherbatsky however misreads *bhāvān for bhavān* in the first clause, and translates: *Wenn aber du da glaubst dass es Objecte auch dann wirklich gibt wenn man an dem Grundsatz festhält dass alles Existierende* (*bhāvān*) *blosse Vorstellung* (*buddhīr*) *ist, so* (*ist dir entgegenzuhalten dass*) *diese* (*deine Vorstellungen*) *falsche Vorstellungen sein würden*". (*op. cit.* p. 262)

Even if *bhāvān* were the correct reading this appears to be, linguistically, a very improbable interpretation of *bhāvān buddhīr āśritya*. I do not believe that there is any reference to an idealist here,—in spite of Vācaspati Miśra.

sophy, p. 73) that Vasubandhu in the *Buddhagotraśāstra* refutes a *Vaiśeṣika* doctrine of sound as comprising three moments, a doctrine which is not found in the *Vaiśeṣikasūtra* but only in the *Bhāṣya*. "Praśastapāda is evidently its originator".[1]

From these facts he draws the conclusion that Praśastapāda was either a predecessor or a contemporary of Vasubandhu. The problem of the relation between *Vaiśeṣika* and Buddhist logic, therefore, has now assumed for him an entirely different form. It is no longer a question whether Praśastapāda borrowed his logic from Diṅnāga, or *vice versa*. The suggestion now made is that Vasubandhu made use of Praśastapāda's logic, and that therefore Diṅnāga's logic is derived through Vasubandhu from Praśastapāda. This however assumes that there was no development in the *Vaiśeṣika* school between the *Sūtra* and *Praśastapāda*,—an improbable assumption.

The date of Vasubandhu. If the date of Vasubandhu could be determined it would provide an invaluable fixed point for the determination of other dates. Unfortunately it remains controversial. Takakusu,[2] basing his argument on the biography of Vasubandhu by Paramārtha, came to the conclusion that he lived 420—500 A.D. This was generally accepted until Noel Péri[3] advanced strong reasons for carrying the date back a century and a half earlier. Vincent Smith[4] and Keith[5] accept Péri's

[1] Stcherbatsky, German Transl., p. 265 The reference is to *PBh* p 287. Having now come to regard Praśastapāda as an original thinker, he inclines to the view that his logic also is not a borrowed thing

[2] *On the Date of Vasubandhu, JRAOS* 1905; *and Bulletin de l'Ecole Française de l'Extrême-Orient*, 1904, p 37.

[3] *Bulletin de l'Ecole Française de l'Extrême-Orient*, 1911, pp. 339 ff.

[4] *Early History of India*, 3rd edn., pp. 328—334.

[5] *Buddhist Philosophy*, pp. 155-6.

conclusions; but Stcherbatsky[1] considers that they are based on the false assumption that there was only one Vasubandhu, whereas in fact there were two,—if not three,—famous persons of this name. One was the great Vasubandhu, a *Hīnayānist* '*Vṛddhācārya* Vasubandhu' who is often cited in Vasubandhu's *Abhidharamakośa*. A later Vasubandhu,—commonly called 'the *Bodhisattva Vasu*'—, was a *Mahāyānist* author of a commentary on Āryadeva's *Śataśāstra*: Takakusu's date is the probable date for him.—Until this controversy is decided, it is useless to build up an absolute chronology round the date of Vasubandhu as a fixed point.

SECTION 4. UDDYOTAKARA AND DHARMAKĪRTI.

Uddyotakara must have been either contemporary with or prior to the novelist Subandhu, who speaks

[1] *Buddhist Epistemology and Logic*, German translation, note 420, p. 289. See also *Central Conception of Buddhism*, 1923, p 2, note 2, where Stcherbatsky writes,: "That there were two Vasubandhus is not 'a guess with no solid basis' the *Kośa* actually quotes the opinions of a *vṛddhācārya Vasubandhu* and rejects them (i 13, Tibetan text p 23, cf. Yaśomitra's comment)". Keith, *loc cit*, says that Yaśomitra's comment can be read to mean that the author of the *Abhidarmakośa* refers to Vasubandhu, brother of Asanga, but that this suggestion is on the whole implausible Stcherbatsky goes on "There remain the dates of the Chinese translations of Asanga and Vasubandhu, which alone, if correct, would be sufficient evidence to assign them to the fourth century Otherwise one feels inclined to bring Vasubandhu nearer to Dinnāga, whose teacher he was" According to Takakusu all the works certainly attributable to Vasubandhu were translated into Chinese between 508 and 569 There is a *śataśāstraṭīkā* translated in 404, which is of doubtful authorship. Stcherbatsky appears to assign this to the Vasubandhu for whom he accepts as the most probable date that assigned by Takakusu i.e. 420—500 That is why he suggests a doubt as to the accuracy of the Chinese statement that it was translated in 404 (if I understand him aright). Péri's argument rests partly on this, but not entirely.

The Vasubandhu with whom we are concerned is the logician referred to by Uddyotakara, and the author of the *Tarkaśāstra* assigned to 'Vasubandhu'. He was traditionally the teacher of Dinnāga

of him by name in his *Vāsavadattā*[1]. Subandhu in turn is complimentarily referred to by Bāṇa, who writes as a youthful poet in the later years of Harṣa (604—648) at Thānesar, and is apparently[2] paying a compliment to Subandhu on the recent production of his *Vāsavadattā*. It may be similarly conjectured that Subandhu (writing perhaps about 640 A.D.) is honouring a philosopher still living at the court of Harsa when he speaks of the stability of the *Nyāya* as being embodied in Uddyotakara.[3]. And the latter conjecture finds some confirmation in a chance phrase used by Uddyotakara in the *Vārtika* (p. 113): 'this road leads to Srughna'. For, as Vidyābhūṣāṇa points out, Srughna was only forty miles distant from Thānesar, and must from its position have been an important stage for travellers to or from Thānesar[4]. It is not improbable therefore that Uddyotakara lived at Thānesar in the reign of Harṣa.

Uddyotakara himself tells us that his commentary is intended to put an end to the misunderstanding of Akṣapāda's teaching which had been brought about by bad logicians (*kutārkika*) and Vācaspati Miśra explains that these bad logicians are Diṅnāga and others[5]. It has been held[6] that the *Bauddha* logician Dharmakīrti was a contemporary of Uddyotakara and is referred to in the *Nyāyavārtika* as the author of a *Vādavidhi* and a *Vādavidhānatīkā* which Uddyotakara mentions by name[7]. But

[1]Fitzedward Hall's edn p 235 See note 3.

[2]*Harṣacarita, ucchvāsa* I (cited by Vidyābhūṣaṇa, *H I L* p 123)—*kavīnām agalad darpo nūnam Vāsavadattayā.*

[3]*Nyāyasthitim ivoddyotakarasvarūpām*

[4]Vidyābhūṣaṇa says "It was very probably this route by which Hiuen-thsang reached Srughna A.D 635"

[5]See the introductory stanza to *NV*, and *NVT's* comment thereon

[6]Vidyābhūṣana, *H I.L.* p. 124 · Keith, I. L. A., p. 28. *JRAS* 1914 pp. 601—606 and 1102-3.

[7]*NV* p. 121 l. 2, p 120 l. 6-7. See also p. 156 l. 17 with Jhā's emendation · and p. 159 l. 3, where the "*granthakāra*" and "*bhāṣyakāra*"

there are reasons for identifying the *Vādavidhi* with a work which Chinese tradition asserts to have been composed by Vasubandhu and of which Hiuen-tsang—a contemporary of Uddyotakara—says that he saw a copy during his travels in India. No other reference by Uddyotakara to Dharmakīrti and his works has been adduced: and there are positive indications that, although Vācaspati Miśra frequently extends the application of Uddyotakara's arguments against Dinnāga so as to make them bear upon Dharmakīrti's statements, Uddyotakara himself was either unaware of or else ignored Dharmakīrti's views. Vācaspati Miśra is careful to point out that Uddyotakara's criticism of Dinnāga's definition of perception would not be applicable to Dharmakīrti's revised statement, though it is applicable to Dinnāga's[1]. If Uddyotakara had been aware of a revised form of the *Bauddha* doctrine to which his criticism did not apply, it is likely that he would have supplemented or modified his arguments Besides the chronological indications are that Dharmakīrti was rather later than Uddyotakara[2]. He is not mentioned by Hiuen-tsang (629—645 A.D.), but is spoken of by I-tsing (671—695 A.D.) as having introduced reforms in logical theory. Vidyābhūṣana finds a reference to the *Nyāyavārtika* in his *Nyāyabindu*, but this is doubtful[3].

may refer to the author of the *vādavidhi* and the author of the *vādavidhānaṭīkā* See *Fragments from Dinnāga*, pp 26—28

[1]See *Fragments from Dinnāga*, Fragment A, p 8, *NVT* p 102 l 17.

[2]Ui's conclusion, *VP* pp. 17-18. Tradition says that when Dharmakīrti was converted to Buddhism he was admitted into the priesthood by Dharmapāla If this is reliable, and if Ui's date for Dharmapāla is correct, viz., 539—570 (*VP*. p. 10 n. 4), then Dharmakīrti would be earlier than Uddyotakara But Tibetan tradition is different as to Dharmapāla's date, and Vidyābhūṣana places him c. 635 A.D.

[3]*H. I. L.* p. 124, citing *NB* chap. III pp 110-111. Also *H. I L.* p. 306, citing K. B. Pāthak's *Bhartṛhari and Kumārila* in *J. B. B. R. A S.* 1892 vol. xviii p. 229,—"according to the *Jaina Slokavārtika* Uddyotakara is attacked by Dharmakīrti".

Dharmakīrti's *Nyāyabindu* is a brief work, and, although its recognised importance is shown by the commentaries written upon it,[1] the attention which it has attracted is partly due to the historical accident that it has survived in Sanskrit. For it is after all no more than a manual, and cannot be compared for philosophical interest with the monumental works of Uddyotakara and Vācaspati Miśra. Uddyotakara's *Nyāyavārtika* is on the other hand one of the world's great treatises on logic; though its greatness tends to be obscured by the atmosphere of incessant and often hyper-critical polemic in which it has its being, and which makes it a matter of considerable difficulty to discover what its author's positive doctrine is. Vācaspati's phraseology[2] suggests that it had become obsolete even in his time, two centuries after its composition: and it seems clear that it failed to achieve that *nyāyasthiti*, or establishment of the ancient tradition of the *Naiyāyika* school as against the innovating logic of

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[1]The *Nyāyabinduṭīkā* by Dharmottara, edited in the Bibl. Ind. edn. of the *Nyāyabindu*, P Peterson also a *ṭippanī* edited in the Bibl Buddh., St. Petersburg, 1909. Peterson, who discovered and published the *Nyāya bindu* in 1889, did not know that Dharmakīrti was its author This was established by Pāthak in *JBRAS* 1894, vol. xviii p. 88 ff and p 213 ff Cf Jacob in *JRAOS* 1905 pp 361-2 Vidyābhūṣaṇa identifies its Tibetan version, *H. I. L.* p. 309

[2]*NVT* p 1, introductory verses 5-6 —*icchāmi kim api puṇyam dustara-kunibandha-pankamagnānām Uddyotakaragavīnam atijaratīnāṁ sa muddharaṇāt*—"I look for some merit from rescuing the aged doctrines of Uddyotakara from the treacherous swamp of bad commentaries in which they were sunk". Udayana in *NVTP* p. 9 makes an objector say that the tradition (*sampradāya*) was broken after Uddyotakara, and that therefore Vācaspati's comment cannot claim to be a good comment—*sunibandha*—as opposed to these bad commentaries—*kunibandha*. Vācaspati is made to reply that the elixir of the teaching received from his preceptor Trilocana has restored the youth of the tradition · *Trilocanaguroḥ sakāśād upadeśarasāyanam āsāditam amūṣāṁ punarnavībhāvāya dīyate*. This is a clear indication that there was an uneasy consciousness of a break in the continuity of the teaching of the school after Uddyotakara.

the *Vaiśeṣika* and *Bauddha* schools, which it was Uddyotakara's professed object to achieve. In the two centuries which followed logic fell into the hands of eclectic logicians, and the pure *Naiyāyika* tradition may perhaps be said to end with Uddyotakara.

SECTION 5 KUMĀRILA AND VĀCASPATI MIŚRA

There is no logic in the *Mīmāṁsā-sūtra*; but a theory of knowledge and the beginnings of logic proper are to be found in the *tarkapāda* of Śabara's *Bhāṣya* thereon; that is in his comment on *Mīmāṁsā-sūtra* I.i. Śabara's date is uncertain, and the question is complicated by the fact that most of his logical teaching is given, not as his own, but in the form of citation of a long passage from an earlier anonymous commentator, the '*vṛttikāra*.' This passage polemises against a doctrine which is not the developed idealism of the *vijñānavāda*. It seems to be much the same as that attacked in the *Vedānta-sūtra* and the *Nyāya-sūtra*, though perhaps the idealistic moment in the argument is more prominent than it is in the theory attacked by the *Nyāya-sūtra*. Keith concludes that the *Vṛttikāra*[2] is probably not later than the fourth century A.D.[1]. The language used sometimes suggests acquaintance with the *Nyāya-sūtra*; and the logical conceptions are certainly considerably earlier than those of Praśastapāda, and possibly rather earlier than those of Vātsyāyana. Śabara does not seem to be separated from the *Vṛttikāra* by any considerable interval: and a date in the neighbourhood of 300 A.D. may be provisionally assigned to both writers.

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[1]*Karma Mīmāṁsā*, p 7. The passage in Śabara is dealt with *infra* in the chapter on Perception

The beginnings of logical theory here laid down developed into two *Mīmāṁsaka* schools: the ***Prābhākara***, based on the *Bṛhatī* commentary on *Śābarabhāṣya* by Prabhākara, to whom a date about 600-650 A.D. has been assigned[1]: and the *Bhāṭṭa* school, which derives its name and doctrine from Kumārila Bhaṭṭa, whose *Ślokavārtika* or verse-commentary on the *tarkapāda* of Śabara's *Bhāṣya* is one of the most famous and the most frequently cited of Indian philosophical works. Kumārila cites and criticises Bhartṛhari,[2] the philosophical grammarian and author of the *Vākyapadīya*, who is also cited by Vācaspati Miśra. Bhartṛhari is stated by I-tsing, the Chinese traveller who was his later contemporary, to have died in 650 A.D. Kumārila is himself cited and critised by Saṁkarācarya[3]: and Saṁkara's date (after much controversy) seems to be fixed in the neighbourhood of 800 A.D. On these grounds the date 700-750 has been assigned to

[1]Keith, *Karma Mīmāṁsā* pp 9-10, and note 2 to p 9 Gaṅgānātha Jhā published an account of the doctrines of the school in his *Prābhākara School of Pūrva Mīmāṁsā*, Indian Thought, vol II, 1910 (Allahabad), which still remains (I believe) the sole source of knowledge of that school. The *Bṛhatī* itself follows on a *Vārtika* (not that of Kumārila) which Dr Jhā regards as the source of the *Prābhākara* school. Dr Jhā argues that Prabhākara is earlier than Kumārila and rejects the tradition which makes the former a pupil of the latter *PSPM* pp 10—17 But the question has been re-opened by K S Rāmaswāmy Śāstry Śiromaṇi in his papers on *Kumārila and the Bṛhaṭṭīkā*, and on *Forgotten Kārikās of Kumārila*, read before the Third Oriental Conference (*Madras*, 1924) and the Fourth Oriental Conference (*Allahabad*, 1926)

Further examination of the *Bṛhatī* on *Adhyāya* I *pāda* i would certainly throw fresh light on the development of logical conceptions A *MS* of the *Bṛhatī* is in possession of the Bengal Royal Asiatic Society. It is not clear from Dr Jhā's account how much of the doctrine is to be found in the *Bṛhatī* itself, and how much in the commentators on it.

[2]See Pāthak's *Kumārila and Bhartṛhari*, *in JBRAS* vol xviii, 1892, p 213 ff. The reference is Kumārila's *Tantravārtika* I. i. 3

[3]Pāthak notes the citation by Sureśvara in his *Taittirīyavārtika* (Ānandāśrama edn. p. 5) of a couplet from *Ślokavārtika*, the section called *saṁbandhākṣepaparihāra*, verse 110 (Cankh edn. p. 671). Sureśvara is commenting on a passage in Saṁkara's *Taittirīyabhāṣya* which appears to paraphrase the couplet from Kumārila Pāthak says that Saṁkara also refers to Kumārila in his *Śārīrakabhāṣya*, Ānandāśrama edn. p. 285.

Kumārila, and this may be accepted as the nearest approximation at present possible. His logic owes much of its detail to Praśastapāda and to Diṅnāga, the latter of whom he criticises; and he seems to refer also to Uddyotakara. The most noteworthy feature in it is his emphasis upon the part played by the universal (*sāmānya*) in inference, and his quantitative formulation of the relation of the major and middle terms in the syllogism as *vyāpya* (*gamaka*) and *vyāpaka* (*gamya*). In these respects he only carries further doctrines already contained in Praśastapāda, and he probably had much to do with the introduction into later *Naiyāyika* logic of elements in Praśastapāda's logical doctrine which Uddyotakara rejected. His logical doctrine is very much that of the 'classical' *Nyāya*: and the frequency with which his *Ślokavārtika* is cited by Vācaspati Miśra and Śrīdhara[1] is an indication of the influence which that work had on later writers on *Nyāya*.

Vācaspati Miśra gives us his own date in the closing verses to his *Nyāyasūcīnibandha*,—his 'edition' of the *Nyāya sūtra*, arranged into *prakaraṇas* or topics:

nyāyasūcīnibandho 'sāv akāri sudhiyāṁ mude
śrīvācaspatimiśreṇa vasvaṅkavasuvatsare.

Vasvaṅkavasu means 898. But what era is intended?

If it were the *Śaka* era, the date given would be equivalent to 976 A.D., which is too late, seeing that Udayana, who wrote the *Nyāyavārtikatātparyapariśuddhi*—a commentary on Vācaspati's *Nyāyavārtikatātparyaṭīkā*—, again gives us his own date as 984

[1]Gaṅgādhara Śāstrī notes seven quotations from the *Ślokavārtika* and two from the *Tantravārtika* in his edition of the *NVT* Faddegon (*Vaiś. System*, p 601) identifies in Śrīdhara's *Nyāyakandalī* twelve quotations from the *Ślokavārtika* and three from the *Tantravārtika*.

A.D.[1], and an interval must be supposed between the two commentaries. For this and other reasons[2] the year 898 must refer to the *Vikrama* era, and must be understood as equivalent to 841 A.D.—Vācaspati Miśra was a doctor of many philosophies. He gives us a list of his own works in the closing verses to his *Bhāmatī* or commentary on *Śaṁkara's Śārīraka-bhāṣya*. The list there given is (1) *Nyāyakaṇikā* (2) *Tattvasamīkṣā* (3) *Tattvabindu* (4) a commentary on *Nyāya* (5) a commentary on *Sāṁkhya* (6) a commentary on *Yoga* (7) a commentary on *Vedānta*. The four latter commentaries—*nibandha*—are no doubt the *Nyāyavārtikātātparyaṭīkā*; the *Sāṁkhyatattvakaumudī*; the *Tattvavaiśāradī*, on the *Yoga*; and the *Bhāmatī* itself. The last mentioned is of course the latest-written of these seven works. The *Nyāyakaṇikā*, a gloss on Maṇḍana Miśra's *Vidhiviveka* (on the *Mīmāṁsā*), is mentioned in the *Nyāyavārtikātātparyaṭīkā*[3], as is also the *Tattvasamīkṣā*[4].

The *Nyāyavārtikatātparyaṭīkā* itself is mentioned in the *Sāṁkhyattvakaumudī*[5] We are thus able to fix the order of Vācaspati's works to this extent, that (1) and (2) in the above list preceded (4), that (4)

[1]At the end of the *Lakṣaṇāvalī* —
tarkāmbarāṅkapramiteṣv atītesu śakāntataḥ varṣeṣūdayanaś cakre subodhāṁ Lakṣaṇāvalīm

This is cited by Gaṅgādhara Śāstrī in his preface to *NVT*, together with the couplet from the *Nyāyasūcīnibandha* He argues convincingly that Udayana's preliminary invocation proves that Vācaspati was much earlier than Udayana, and concludes that Vācaspati's 898 must refer to the Vikrama era, and so be read as 841 A D He does not mention the tradition that the *rājavārtika* mentioned by Vācaspati in the *Sāṁkhyatattvakaumudī*, was written by Bhoja Raja (1018—1060),—presumably ignoring it as worthless It must certainly be disregarded in face of his argument

[2]Keith, *ILA*, pp 29-30 Woods, *YS*, pp xxi-xxiii.

[3]*vipañcitaṁ caitad asmābhir Nyāyakaṇikāyām* *NVT* p 395 l. 16

[4]*diṅmātram atra darśitam, prapañcas Tattvasamīkṣāyām asmābhiḥ kṛtaḥ* *NVT* p 57 l. 28. The doctrine here referred to as expounded at length in the *Tattvasamīkṣā* is the theory of error in its five possible forms. This passage of the *NVT* is translated here, *infra*, chapter I section 5.

[5]Stated by Gaṅgādhara Śāstri, in the brief but very valuable preface already referred to.

preceded (5), and that (7) was the latest of all. It is not unreasonable to conjecture that (6), the commentary on *Yoga*, was written after (5), the commentary on *Sāṁkhya*: so that the list of his works which he gives follows the order in which they were written. He does not mention the *Nyāyasūcīnibandha*, probably because that was a mere appendix to his commentary on the *Nyāya*: in which case we may fairly infer that 841 A.D. is the date of the earliest of his four great commentaries. We must then allow at least a period of ten years, if not more, between this date and the date of his commentary on Śaṁkara's *Bhāṣya*, which would therefore have been composed after 850. This conclusion removes a certain difficulty by widening the interval of time between Śaṁkara and his commentator.

As regards the remaining two works, the *Tattvasamīkṣā* would seem to have been a Vedantist work in which the nature of truth was dealt with, while the *Tattvabindu* treated of Kumārila's teachings.

Six of these seven works are not only extant but available in modern editions[1]—a rare fate for an Indian philosopher. Vācaspati Miśra admits that his logic contains innovations, notably in respect of his doctrine of *savikalpaka* and *nirvikalpaka* perception. This he attributes to his teacher, Trilocana, who must have flourished about 800 A.D., but about

[1]The *Nyāyakaṇikā* with the *Vidhiviveka* was issued as a reprint from *The Pandit*, Benares, 1907. (*The Pandit*, XXV—XXVIII, 1903—1906). the *Tattvabindu* similarly, 1892 (editor, Gaṅgādhara Śāstrī Tailaṅga). The *Tattvasamīkṣā*, so far as I know, has not been published *NVT* in Viz Skt. Series, 1898 The *Sāṁkhyatattvakaumudī*, Benares, 1889. The *Tattvavaiśāradī*, Bombay Skt Series 1892 The *Bhāmatī*, Bibl Ind., 1880.

The *Nyāyasūtroddhāra*, which is another recension or 'edition' of the *Nyāyasūtras*, is attributed by Keith (*ILA* p. 29) and Woods (*Y.S.*, p. xxii n.) to our Vācaspati Miśra But Vidyābhūṣaṇa (*HIL*, p. 460) attributes it to the much later writer of that name who lived about 1450 A D This would dispose of the conclusion drawn from the colophon of this work that *our* Vācaspati Miśra was a native of Mithilā

whom we know little beyond what Vācaspati tells us[1]. Udayana appears to generalise this into the statement that Vācaspati used the teaching of Trilocana to rejuvenate the *Naiyāyika* school, the tradition of which was in its prime in the time of Uddyotakara. The renovation was carried out in an electic style which owes much to Praśastapāda, as well as to the *Bauddha* and *Mīmāṁsaka* logicians whom the new school continued to combat. But it was not 'modern'.

It would be difficult to point to any doctrine in the *Tātpāryaṭīkā* which does not derive from the earlier schools. It is with Udayana that new conceptions begin to appear. A survey of the logic of the older schools rightly ends with Vācaspati.

[1]See the note on Trilocana, *infra* (footnote 1 p 106)

CHAPTER I

TRUTH

Value of truth—Validity—*svatahprāmānya* and *paratahprāmānya*—Negative judgment—Conditions of possibility of error—Five theories of error (translation of *NVT*, pp 54—57) —(i) Error as apprehension of the merely subjective *ātmakhyāti*. (ii) Error as apprehension of the *non-existent*. *asatkhyāti* (iii) Error as apprehension of *what neither is nor is not*. *anirvacanīyakhyāti* (iv) Error as *non*-apprehension *akhyāti*. (v) Error as the apprehension of things *otherwise* than as they are *anyathākhyāti*.

THE problems raised in this and the following chapter are epistemological What is our guarantee that we really *know* when we think that we know? How is it that *error* is possible if the nature of knowledge is such that *de jure* the object of cognition is reality itself? If error presents 'false objects' to the mind, is it not a possible hypothesis that the objects of perception are as unreal as dreams? As a matter of fact is it possible to give an intelligible account of the object considered as real, and does it not dissolve under intellectual analysis? And finally is not the perceptual process itself such as to suggest that the object, with which it supposes itself to be in immediate contact, is in fact a complex of fictive elements substituted by the imagination for the thing-in-itself?

These are still the problems of modern epistemology, and the spirit and method in which the Indian philosopher approaches them are in no important

respect different from, but in all essentials quite parallel with, the spirit and method of contemporary philosophy. It is easy to abuse the comparative method in interpreting ancient thought; and the student of Indian philosophy has to be constantly on his guard against a tendency to confound differences which is the most insidious enemy of a sound and scholarly understanding. But it does not follow that, because the comparative method has been widely abused, no use can be made of it And it is perhaps in these problems of epistemology that the use of the comparative method is most enlightening. I therefore make a few observations here on some of these problems as they present themselves to modern thought, by way of introduction to the Indian discussions of them.

The so-called ' problem of knowledge ' of modern epistemology has arisen from the view that the mind knows reality through the medium of its ideas: from which it seems to follow that the direct object of the mind is its own ideas. Locke therefore defined an idea as the object of the understanding when a man thinks. From this it is a natural step to Berkeley's principle *esse* is *percipi*: for it seems useless to suppose the existence of things ' outside the mind ', seeing that we are confined within the circle of our own ideas, which on Locke's account of the matter, are the objects of the mind. Nor does there seem to be any way out of the difficulties thus arising, so long as we accept Locke's ' way of ideas ' Reid saw this, and therefore asserted the fundamental position of a realistic, as opposed to an idealistic, epistemology,—that we apprehend reality directly and not through the medium of ideas. The idea, as a *tertium quid* between the mind and things, is therefore denied to exist. Similarly the starting-point of contemporary

realism is perhaps Moore's article entitled '*A Refutation of Idealism*'[1] which simply denies the self-evidence of the Berkeleian principle *esse* is *percipi*. The realist, on the contrary, asserts the self-evidence of the contradictory principle—*esse* is not *percipi*. The essence of knowledge is that the object of the mind when a man thinks is the real itself, and not his own 'ideas'. There is then no problem of knowledge.

Unfortunately there is a problem of error, on the realist theory of knowledge, just as there is a problem of knowledge on the 'idealist'[2] theory. In fact it can fairly be said that error is impossible for the realist, and truth for the idealist[3]. As soon as the realist admits, even in a single case, the presentation of a *false object* to the mind, he is back again at the admission from which the idealistic hypothesis starts: for if an object is unreal it would seem inevitable to admit that its *esse* is *percipi*. And yet it has all the stubborn objectivity of a real object and if objectivity is in even *one* case not a guarantee of reality, how can we be sure that it is a guarantee of reality in *any* case? Thus the modern realist finds himself forced back upon the paradox of the *akhyāti-vāda*, the *Mīmāṁsaka* theory of error,—that error is merely negative, an absence of apprehension: and that every object apprehended is entirely *real*—although it is not the *entire* reality. *Sarva eva pratyayā yathārthāḥ*. He will also hold the *Mīmāṁsaka* view of validity, that cognitions are self-evidently true (*svataḥ-prāmānya*) Similarly, the *Mīmāṁsaka* is at one with

[1] G E Moore in *MIND* n s., vol xiii, 1904 Reprinted in his *Philosophical Studies*, London, 1922

[2] The terms objectivist and subjectivist would be preferable, if we could depart from the accepted opposition of realist and idealist. At any rate I mean by 'idealist' subjectivist.

[3] There will of course be no distinction between truth and error for the idealist, so that error also is impossible for him

the modern realist in denying that thoughts are 'presentations' (*anākāraṁ jñānam*)[1]—there are no 'ideas' in Locke's sense. But it is no easy matter to explain error as mere failure to apprehend[2]. And the *Naiyāyika* (who takes up the position of the modern 'critical realist') seems therefore to have the better of the argument with his view that error is positive misrepresentation or seeing things *wrong* (*anyathākhyāti-vāda*). This is the common-sense view that some of our objects are real and some are false. But it is difficult for realists of this school to avoid the admission that in some cases at any rate the idealist's account is right and that the mind has the faculty of projecting its own ideas under the guise of an external reality[3] (*ātmakhyāti-vāda*); and this seems to debar us from admitting the self-evidential nature of even true cognitions (*svataḥ-prāmāṇya*), since both true and false cognitions are equally objective, so that it will be impossible to distinguish between them—unless by some criterion extrinsic to the cognition (*parataḥ-prāmāṇya*), an unsatisfying doctrine which the *Naiyāyika* is therefore compelled to maintain, though without laying too much stress upon it. But, whatever may be the difficulties of the two 'objectivist' or realistic theories of error discussed by Vācaspati, he puts the realistic 'refutation of idealism' in a way which any modern realist would approve when he asserts the inherent *objectivity* of what we apprehend and raises the searching question "whence comes this notion of the *ideality* of the apprehended object"?

[1]P. 96 *infra*

[2]As Alexander candidly admits *Space, Time and Deity*, vol ii, p. 199, "I cannot help admitting how much simpler it would be and how much laborious explanation it would save if only it were true that our intuitions and sensations were mental as is commonly supposed".

[3]P. 59 *infra*—*svākāram bāhyatayā 'lambante vibhramāḥ*.

SECTION 1. VALUE OF TRUTH

The *Nyāya-sūtra* gives no definition of truth. In the three opening *sūtras*[1] it says that the attainment of the *Summum Bonum* results from knowledge of the real nature or truth (*tattva*) of the sixteen topics (*padārtha*)[2] of the system: that release (*apavarga*) from the cycle of birth and rebirth results from the absence, following upon such knowledge of truth, of the series error—defect—activity—birth—pain[3], there being a successive disappearance of these when truth is known: and that perception, inference,

[1]Known collectively as the *trisūtrī*—see colophon at p. 11 of *NBh* But according to Vācaspati Miśra's division of the *śāstra* in his *Nyāyasūcīnibandha*, the first two *sūtras* form one *prakaraṇa* or section, while the third belongs to the second *prakaraṇa* (consisting of *sūtras* 3—8 and dealing with the topic of the definition of the *pramāṇas*)

[2]Enumerated in this *sūtra* as —instruments of knowledge; objects of knowledge, doubt, motive, example, established tenet, members of the syllogism, indirect reasoning (*reductio ad impossibile*), certitude; discussion; disputation, eristic, fallacious middle terms, equivocation; sophistical refutations, occasions of rebuke i e of defeat in argument.

These are in no sense 'categories', but rather a list of the contents of the *śāstra* The *Naiyāyika* of course does not suppose that a knowledge of the logical notions, which form fifteen out of these sixteen 'categories', constitutes the soul's salvation but he is convinced that bad logic will incur damnation The knowledge that constitutes salvation is knowledge of certain topics that fall under the category of 'objects of knowledge', notably the topic of the nature of the soul. The other fifteen categories constitute the equipment for getting and guarding right knowledge of this So Vātsyāyana says *ātmādeḥ khalu prameyasya tattvajñānān niḥśreyasādhigamaḥ*—the attainment of the highest good results from knowledge of the true reality of such objects of knowledge as the soul (*NBh.* p 2 1 16 on *NS* I. i. 1) And he claims that the *nyāyaśāstra* is the *ānvīkṣikī vidyā* traditionally spoken of as fourth among the branches of knowledge—(*a*) the three *vedas* (*b*) the science of wealth (*c*) politics, or the art of kingship (*d*) *ānvīkṣikī vidyā* (*NBh* p 3 ll. 5-6) Without its treatment of the logical categories the *Nyāyaśāstra* would be just like the *Upaniṣads* i e it would be knowledge of the true self (*adhyātmavidyāmātram syāṁ syād yathopaniṣadaḥ*) The *Nyāya* is therefore a system of applied logic: and its application is to the ontological problem of the soul.

Vātsyāyana is aware that the sixteen topics involve a cross-division e g. the second 'category' includes all the rest. This is no objection in a list of contents

[3]These constitute *saṁsāra*, the cycle of existence. *NBh* p. 8 l. 1ff *ta ime mithyājñānādayo duḥkhāntā dharmā avicchedenaiva pravartamānāḥ saṁsāra iti.* Only right knowledge can make a break (*viccheda*) in the vicious circle of being.

'analogy'[1] and testimony, are the means of knowing truth (*pramāṇa*)[2]. The introductory portion of

[1]This is not a rendering, but a symbol, for *upamāna*, the meaning of which is interpreted below, p. 312 ff.

[2]For the varying enumeration of the 'instruments of knowledge in the different schools, see below p. 305 and footnote

'Testimony' is fundamental in the *Nyāya*, as in all the orthodox philosophies (It is true that the *Vaiśeṣika* school nominally rejected testimony as a separate instrument of knowledge, reducing it to inference But as the inference to which testimony is thus reduced is not an inference which tells us anything about the matter testified, but only an inference from the credibility of the witness, there is no practical difference between the attitude of the *Vaiśeṣika* and that of the other schools to scriptural and canonical authority). Vātsyāyana explicitly says that the 'investigation', *anvīkṣā*, in virtue of which the *śāstra* claims to be *ānvīkṣikī vidyā*, is inference supported by perception *and testimony* The '*nyāya*', or method of demonstration from which the system takes its name, is certainly not pure reasoning "What is this *nyāya*? It is the investigation of a thing by the instruments of knowledge—*pramāṇair arthaparīkṣaṇam nyāyah*" (And testimony is one of the *pramānas*, which is admitted specifically to a position as one of the members or *avayava* of the demonstration, in the Proposition or *pratijñā*, the preliminary statement of the conclusion The mere statement of the *probandum* is in fact part of the ground for accepting it, in a genuine *nyāya* for, as Vātsyāyana elsewhere says, *āgamaḥ pratijñā*—the Proposition is authoritative testimony The other 'members' merely follow up and explicate this authority-generated knowledge And so the present passage goes on —) "Inference relying on perception *and testimony* is *anvīkṣā*, investigation that is, the *anvīkṣaṇa* or *after*-apprehension of something that has already been '*īkṣita*', apprehended, by perception *and testimony* The *Nyāyaśāstra* functions through this sort of '*anvīkṣā*' or investigation, and so constitutes '*ānvīkṣikī vidyā*', the science or art of investigation (But) inference which contradicts perception or *testimony* is fallacious demonstration (*nyāyābhāsa*)". However impeccable an inference may appear, judged by the canons of un-orthodox logic (e g, by the *trairūpya* of the Buddhist logic), it is still *bādhita*, null and void, if it contradict authoritative testimony (*NBh* p 3 ll 14—17)

Uddyotakara is even more explicit, if possible, than Vātsyāyana "The characteristic of the *śāstra* is exposition of the truth about a thing which transcends perception or reasoning . . . When people rely on contact of object with sense, they (apprehend truth) through perception when they rely on experience of a middle term and on memory (of connection between the middle and the major) they apprehend it by inference · but when they rely on authoritative instruction (*upadeśa*) then the *śāstra* comes into play" *NV* p 2 l 8 and l 7

It might seem that Indian philosophy of the orthodox schools, starting thus from foregone conclusions, must be a system of dogmatism of little interest to those who do not accept the scriptural or canonical authority on which it is professedly based But this is in fact far from being the case. The orthodox schools had the advantage of facing, in Buddhism, a vigorous opposition which pressed free enquiry to the extreme limits of scepticism. These opponents outside the fold had to be met with their own weapons, which were perception and inference. The fortunate result was that the trammels of authority do not prevent the Indian thinker from following where the argument leads

Vātsyāyana's comment on the first *sūtra* embodies, however, three *sūtra*-like 'sentences' (*vākyāni*)[1] which seem to raise the problems of the criterion of truth and of the nature of the object of knowledge in a specific form. In the commentators' observations on these 'sentences', and on the second *sūtra*, a more developed answer can be found to the question What is truth?,—and, more particularly, to the question What is error? If there were no error, there could hardly arise any 'problem of truth': and it is in the difficulty of explaining error that the problem of the nature of truth first arises. Thus Vācaspati Miśra (on *NS* I. i. 2) enumerates five theories of error, and refutes four of them[2].

SECTION 2 VALIDITY, SVATAHPRĀMĀNYA AND PARATAHPRĀMĀNYA

The first of the three *vākyas* is as follows :—

1. *pramāṇato 'rthapratipattau pravṛttisāmarthyād arthavad pramāṇam.*

" Knowledge gets at the object : because the capacity of practical activity to achieve its object is condi-

[1]The commentators are unanimous that these are not *sūtras* Vācaspati Miśra calls them *bhāṣyasya vākyam*, which seems to imply that he attributed them to Vātsyāyana There are other passages of the *Bhāṣya* in which similar *vākyas* are found, and in certain cases there was difference of opinion as to whether they were *sūtras* or not The editor of the Vizianagram Skt Series text, Mm Gangādhara Śāstrī, prints them in special type, in deference to the opinion of western scholars (*pāścātyānām matena*) who "argue that someone wrote a *vārtika* between the time of the *sūtra* and that of the *bhāṣya* . just as in the case of the Pāṇinean grammar Kātyāyana came between the time of the *sūtra* and that of the *bhāṣya* : and that these sentences are citations from this *vārtika* " preface p 8 The reference is to the view put forward by Windisch, *Ueber Das Nyāyabhāṣya* (Leipzig, 1887). Mm. Gaṅgādhara Śāstrī disagrees with this view, citing the definition of a *bhāṣya* as a work in which " the meaning of the *sūtra* is explained in words following (i e. closely corresponding to) the *sūtra*, and its own (i.e. the *bhāṣya's*) words are then explained " Innumerable passages could be cited not only from the *bhāṣya* of Vātsyāyana, but also from the work of Praśastapāda (which is not a *bhāṣya* in the ordinary sense) and from the *Vārtika* of Uddyotakara, in which the writer first gives an aphoristic statement and then proceeds to explain it. It seems to me that this may have been a mannerism of the earlier philosophical writers But see above, p. 28.

[2]See below, p 59

-tioned by the grasping of the object through the instruments of knowledge." The purport of this *vākya* plainly is to argue that knowledge (or the instruments of knowledge[1]) must be accepted to be valid, because if it were not so we could not—as we do—achieve our practical objects. That is to say, it seems to be an early and simple statement of the characteristic *Naiyāyika* doctrine of *parataḥ prāmāṇyam*, i.e. the doctrine that the validity of knowledge is known 'from something else' than from the knowledge itself. How do I *know* that I know? Because my knowledge *works* in practice[2]. The opposed doctrine is that taught by the *Mīmāṁsaka* school,—the doctrine of

[1]Strictly speaking, *pramā* is knowledge, and the instrumental noun *pramāṇa* signifies the instrument of knowledge—*pramīyate anena*, or, *pramākaraṇam pramāṇam* Similarly *anumāna*, as the instrument of inference (*anumīyate anena*), is opposed to *anumiti*, inference as a resultant and *upamāna* (*upamīyate anena*) *to upamiti* But these distinctions, though drawn by Vātsyāyana himself were not always rigidly observed by him

[2]That is, the validity of knowledge is known by a subsequent *inference* *Tarkabhāṣā* p 94 1 1 *jñanaṁ hi mānasapratyakṣenaiva gṛhyate, prāmāṇyaṁ punar anumānena*—the cognition, as such, is apprehended by inner-sense perception but the validity of the cognition is apprehended by inference The question as to how the *validity* of cognitions is grasped is quite distinct from the question how we are aware of our cognitions The *Mīmāṁsaka* denies inner-sense perception of cognitions, which is the *Naiyāyika* view stated in the first half of the sentence here cited from the *Tarkabhāṣā* It is the other question, that of the way in which we apprehend the *validity* of cognitions, that we are now concerned with

The *Sāmkhyas* held that both validity and invalidity of cognitions are apprehended from the cognition itself (*svataḥ*) the *Naiyāyikas* held that both are apprehended from something other than the cognition (*parataḥ*) the *Mīmāṁsakas* held that the validity of a cognition is apprehended from the cognition itself, while its invalidity is apprehended from something else (i e from learning of some defect, *doṣa*, which invalidates the cognition Truth needs no criterion but error does) See *SDS*, chapter on the *Jaiminīya-darśana*, p. 218=p 196 in Cowell and Gough · and note 1 p 52 *Cf.* also the *Nyāyapradīpa* commentary to the *Tarakabhāṣa*, p. 88, and Gaṅgānāth Jhā's discussion of this topic in the *Sadho Lal Lectures on Nyāya* (pp. 35—50) Thibaut's admirable translation (in *Indian Thought* vol. II, 1910, pp 28—39) of the passage in the *Ślokavārtika* which deals with this topic, viz. *codanā-sūtra* verses 21 ff , is illuminating (The translation was not continued, and remains a mere fragment But the whole of the *Ślokavārtika* has been translated by Gaṅgānātha Jhā, *Bibliotheca Indica*, *Calcutta*, 1908).

svataḥ prāmāṇyam or self-evidence: that the validity of knowledge is known 'from itself'.

The motive which led the *Mīmāṁsaka* school to adopt the doctrine of the self-evidential nature of cognition is plain from Śabara's commentary on *Mīmāṁsā Sūtra* I. i. 2. It was a device for throwing the *onus probandi* on those who doubted the validity of scriptural injunctions.

"That cognition only is false which, after having originated, subsequently lapses (is set aside)—there arising a further cognition 'this is not so'. But the cognition brought about by a Vedic Injunction is not set aside at any time, or in the case of any person, under any conditions or at any place · hence it cannot but be true" (Thibaut's translation). When the Veda enjoins that a man desirous of heaven should perform sacrifice, how is it possible to *disprove* that sacrifice leads to heaven? It is not possible! *ergo*, the injunction leads to a cognition which is valid: since every cognition is valid unless and until it is disproved—and this can never be disproved. Kumārila (or a predecessor) developed this naïve position into a generalised doctrine of the intrinsically self-evidential character of knowledge. "Some maintain that, since cognitions untrue by themselves cannot by any means be proved to be true, the validity as well as the invalidity of cognitions is due to themselves (is intrinsic). Others hold that a cognition becomes valid or invalid from the ascertainment of either the excellences or defects of the cause to which it is due"[1]. The principal objection urged by Kumārila against the former view is that "without reference to something extraneous it could not be determined which character (validity or non-validity) belongs to which particular cognitions",—so

[1]Thibaut's translation of verse 34 The 'some' referred to are the *Sāṁkhyas*, the 'others' are the *Naiyāyikas*, see preceding note.

that in the end the theory of *intrinsic* validity-and-invalidity has to be abandoned. He then turns to another view[1],—" Let, therefore, non-authoritativeness be considered as the natural character of cognitions, while their authoritativeness depends on something else." The supporter of this view urges that error is the natural thing—as illustrated in the case of dreams: and (invalidity being the mere negation or absence of the positive character, validity) it is methodologically unsound to treat the mere negation, invalidity, as a quality superadded to the cognition, and to assign it to a positive cause, viz., the presence of ' defects ' in the cognition, as the *Mīmāṁsaka* does. The truth rather is that it is the addition of certain virtues or ' qualities ' (*guṇa*)—*extrinsic* to cognition—which makes the cognitive process (in itself inherently invalid), valid. The so-called defects (which are supposed to be the positive cause of error) are no more than the absence of the 'excellencies' " The general conclusion against the *Mīmāṁsaka* then is that Vedic injunctions cannot be considered authoritative, for if they are not due to men[2] (possessing such good qualities as trustworthiness and so on), they cannot claim any authority; and, assuming they were due to men it

[1]Thibaut's translation of verse 38 This is the *Bauddha* view, as appears from the couplets cited in *SDS* and referred to in note 1, p 50 In my text the proper order of the lines is inverted Cowell's translation implies the following, which must be the right order —

pramāṇatvāpramāṇatve svatah sāṁkhyāḥ samāśritāh,
naiyāyikās te paratah, saugatāś caramam svatah,
prathamaṁ parataḥ prāhuḥ prāmāṇyaṁ, vedavādinah,
pramāṇatvaṁ svatah prāhuḥ, parataś cāpramāṇatām.

" The *Sāṁkhyas* hold that both validity and invalidity are intrinsic the *Naiyāyikas* that both these are extrinsic · the *Bauddhas* say that the latter is intrinsic, while the former—validity—is extrinsic the followers of the *Veda* (i e the *Mīmāṁsakas*) say that validity is intrinsic and invalidity extrinsic ".

[2]The *Mīmāṁsaka* view is that the *Veda* has no author, human or divine, but exists from eternity. It is this doctrine that provides the motive for the characteristic *Mīmāṁsaka* tenet of the eternity of sound (*śabda*), which was a principal battleground of the early schools. *Mīmāṁsaka* tenets are often theological dogmas generalised into philosophical theories

would be impossible to show that those men possessed the required perfections (capacitating them to lay down the law on supersensuous matters). Vedic injunctions thus have no ground to stand on "[1].

The principal objections urged by Kumārila against this view are, in the first place, that super-added ' qualities ' could not lend to cognition the capacity to know truth, unless that capacity were inherent in it; since a faculty which a thing does not possess in its own right cannot be produced by another agency[2]. And, in the second place, the demand for proof of the validity of cognition leads to a *regressus ad infinitum*. If you insist on asking ' How do I *know* that I know?', you will also have to ask ' How do I *know* that I know that I know?'. " If even when a cognition has originated its object were not definitely (certainly) known until the purity (excellence) of its cause is cognised through some other means of knowledge, we should have to wait for the origination of another cognition due to another cause . . And this other cognition again would be authoritative only on the cognition of the purity of *its* cause, and so *ad infinitum*. The person proceeding in this way would never reach a final resting place "[3]

[1]Thibaut's translation of verse 46,—*tataś ca puruṣābhāvāt, sati vi śuddhyasambhavāt, nirmūlatvāt pramāṇatvaṁ codanāyāṁ na yujyate*

[2]*na hi svato ' satī śaktiḥ kartum anyena śakyate.* Verse 47.

[3]Thibaut's translation of verses 49—51. Both arguments carry weight, though they do not prove just what Kumārila seems to have thought they proved viz that any individual cognition can claim *svataḥ prāmānya*, self-evidence What they do indicate is that it is useless, and in fact meaningless, to look for a criterion of knowledge outside knowledge . or for a criterion of a particular cognition outside the particular system to which it belongs. As to the *regressus ad infinitum*, this is a *practical* difficulty to which the *Mīmāṁsaka* view is as liable as any other. For there is always the doubt as to whether ' defects ' are present and it is not really disposed of by saying that knowledge is self-evident; for a self-evidence which only lasts until it is displaced by an equally self-evident contradictory cognition, is no guarantee of truth

SECTION 3. NEGATIVE JUDGMENTS

The second and third 'sentences' or *vākyas* in the *Nyāya-bhāṣya* introductory to *Nyāya-sūtra* I. i. 1 are as follows :—

sataś ca sadbhāvo 'sataś cāsadbhāvaḥ

and

saty upalabhyamāne tadanupalabdheḥ pradīpavat.

That is : " The knowledge of what is as existent, and of what is not as not existing " (constitutes truth). The question arises how, in the latter case, there can be apprehension through an instrument of knowledge. " As in the case of a lamp, where an existent thing is perceived, from non-perception of that " (i.e. from not perceiving the non-existing thing we apprehend it as not existing). Vātsyāyana says : *sataḥ prakāśakaṁ pramāṇam asad api prakāśayati*—" the instrument of apprehension that reveals existent things also reveals what is *not* there. When visible objects are apprehended by means of the lamp that shows them, we argue, 'what is not apprehended like this is not here, for if it had been I should have seen it as I see this It is not here because I do not apprehend it (*vijñānābhāvān nāstīti*)' ".

The problem is that of the negative judgment; and the reason why it is raised here is not apparent, seeing that a section is devoted later on to dialectical difficulties in connection with the apprehension of absence or non-existence[1]. Perhaps it was felt that the absence of all reference to non-existence or negation in the enumeration of the sixteen categories in the first *sūtra* needed some explanation. Vātsyāyana, after the observation that the instrument of apprehension that reveals existent things also reveals the non-existent,

[1] In *NS* II. ii. 7—12. The topic is dealt with below, p. 328 ff.

goes on: "and it is the existent that will be taught in sixteen divisions": the implication of which is that in teaching the existent the *śāstra* will have taught what does not exist,—*eo ipso*. Uddyotakara[1] says that the word *tat*, from which *tattva* 'that-ness' is the abstract noun (meaning 'truth' or 'reality'), includes both the existent and the non-existent. That is, the 'that-ness' of things comprises both the truth as to what they are and the truth as to what they are *not*. Both what a thing is, and what it is not, are alike objects of knowledge (*pramāṇaviṣaya, prameya*): and both alike can be asserted or denied. An opponent thereupon suggests that if both the existent and the non-existent are alike *objects* of knowledge (*prameya*) it will be impossible to maintain the distinction between existing and *not* existing This is another aspect of the dialectical difficulty about the negative judgment—how can you know what *is not*? The point here made by the opponent is that in asserting knowledge you assert the *existence* of its object: but in the negative judgment the object is asserted as *not* existing: so that an apparent self-contradiction is involved.

Uddyotakara replies that the inference that two things (existence and non-existence, for instance) are not distinct because they are alike (in respect of both being objects of knowledge, for instance) proves too much. For, by parity of reasoning, a cow would not be distinct from a pot.

SECTION 4 CONDITIONS OF POSSIBILITY OF ERROR

Vācaspati Miśra devotes a section[2] to the likeness between the existent and the non-existent (*sadasatoḥ sārūpyam*), in connection with the problem of

[1] *NV* p. 10 l. 5 ff

[2] *NVT* p. 58 l. 1 ff, in his comment on the second *sūtra*: the topic being the nature of error. He is dealing at this point with a false negative existential judgment e.g the assertion that the soul does not exist.

error. His general position is that false judgments always proceed on the basis of some *verisimilitude*, or community of character between the real thing and the false appearance: "we do not mistake a taste for a colour, nor a mosquito for an elephant[1]". For instance, when the jaundiced eye sees the white conch as yellow, what happens is that (*a*) we experience the yellow of the bile, mingled with the pellucid visual ray, as it emerges, and we experience it without a substrate; (*b*) we experience the conch with its whiteness obscured by the defect in the visual organ, and (*c*) we do *not* experience the *dis*-connection of the quality yellow with the conch. Owing to our failure to apprehend this *dis*-connection, there arises a similarity with the case of residence (of yellow) in such things as the yellow *Cirabilva* tree; and so we erroneously judge that the conch is yellow. Similarly when we have the experience of a lump of cane-sugar which is brought in contact (with the taste-organ) by the touch-organ, its sweetness is not experienced, and we experience the bitterness of the bile resident in the extremity of the taste-organ, while we do not experience a bitter object as the substrate of this bitterness: through not apprehending the absence of connection between the bitterness and the sugar[2], there arises a similarity with the residence of bitterness in the *Neem* tree, etc., and so we form the erroneous

[1] P. 52, l 15, *na hi ˈātu rūpaṁ rasādiṣu hastinaṁ vā maśakādiṣv āropayanti*

[2] The whole passage is difficult to interpret, and particularly the phrase *asambandhāgraheṇa pītacirabilvādisāmānādhikaranyena sārūpyāt*, and the corresponding phrase *sambandhāgrahasārūpyāt tiktanimbasāmānādhikaraṇyena*. [The first instrumental case is the instrumental expressing the means, while the second is the instrumental governed by words expressing resemblance: the meaning being "resemblance to real cases of residence of a quality in a thing,—such resemblance being produced by our failure to see that in the case in question there is not any connection between the property and the thing to which it is attributed"] In the second phrase it seems necessary to read *asambandhāgraha*—, in place of the *sambandhāgraha* of the text.

judgment that this sugar is bitter. But the process is so quick that we are not aware of the succession of phases in it[1]. We do not say that wherever there is resemblance there is error; but that wherever there is error there is necessarily some kind of resemblance. In the same way, in such illusions as those of diplopia, confusion of orientation, and the apparently continuous circle of fire produced by a whirling firebrand,[2] some kind of similarity has to be supposed. This being our general view of erroneous judgment, the objection is urged that (in the case of the erroneous negative existential judgment, 'the soul does not exist'), since there is not any similarity between the absolutely different notions of being and not being, an erroneous judgment would not be possible in this case. The *Vārtika* meets this objection by pointing out (*NV*, p.25, l 13) that being and not being resemble each other in being alike objects of knowledge. Then the objection is urged that, if they are alike, there is no difference between them; and there can be no question of an *erroneous* existential judgment. This objection again the *Vārtika* meets by explaining that the erroneous existential judgment 'the soul does not exist' proceeds by falsely attributing to the soul, which exists, the characteristics which belong to the non-existent, namely, absence of activities and qualities and so on.

The theory of truth and error is developed by the later commentators in connection with the list of heresies,

[1]*atiśīghratayā caiṣa kramo na lakṣyate NVT* p 52 l. 24

[2]*evam dvicandradinmohālātacakrādiṣv api kathamcid sārūpyam ūhanīyam* p 52, last line. The illusion of the *alātacakra* has had a notable history in Indian philosophy The Buddhist uses it to illustrate the illusory character of experience—see *Laṅkāvatāra* I. 41, X 176 and 443. It is borrowed, in this use, by the *Gauḍapādīyakārikā* see Dasgupta, *History of Indian Philosophy*. p 428, and Faddegon, *Vaiśeṣika System*, p 65. In the *Nyāyasūtra*, III. ii 61, the illustration is used in a different way, to support the contention that cognitions cannot be simultaneous—where they seem simultaneous, it is really a case of rapid succession, producing the illusion of simultaneity—like the whirling firebrand.

and the parallel list of orthodox doctrines, given by Vātsyāyana in the *Bhāṣya* on the second *sūtra*[1]: a passage which constitutes a kind of catechism of orthodoxy, drawn up in deliberate opposition to *Bauddha* and other heresy. But it is error rather than truth that seems to need an explanation[2]. Accordingly Vācaspati proceeds to classify theories of error[3].

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[1]*NBh* p. 7 l. 14 to p. 8, l. 6 gives the list of heresies, e g that there is no soul, that what is not the soul (for example, the body) is the soul; that what is really painful is pleasure, that the eternal is non-eternal, that activity does not entail '*karma*' and the fruit of *karma*, that transmigration does not imply a being that is born and lives (*jantur jīvo vā*) a spirit (*sattva*, *masc.*) or soul which dies and after death is, that transmigration comes about by the breaking up and restoration (*ucchedapratisaṁdhānābhyām*) of a continuum (*saṁtāna*) formed of body, organs, '*buddhi*', and '*vedanā*', and does not pertain to a soul (*nirātmaka*); and so on

The parallel list of orthodox tenets is at p 8 l 20 ff It is introduced by the remark that the true doctrine is already implied as the opposite of the above heresies,—*tattvajñānaṁ tu khalu mithyājñānaviparyayeṇa vyākhyātam*.

Vācaspati seems to admit that the first heresy, that of denying a soul, i e. the Buddhist *nairātmyavāda*, might claim certain advantages, as a means of putting an end to desire and aversion (*rāgādinivṛttihetur nairātmyadarśanam*)—for it is his 'self' (*ātma*) that a man *loves* and works for, while he *hates* and works against any who stand in the way of this 'self'. But, says Vācaspati, the doctrine is the prime source of the heresy (*ariṣṭi*) that there is no '*karma*' nor fruit of *karma*, as also of the belief that there is no such thing as transmigration

[2]The older school of *Nyāya* was perhaps a little uncertain in its doctrine of truth. It was rather the *Mīmāṁsaka*, with his doctrine of *svataḥprāmāṇya*, who succeeded best in formulating a self-consistent theory of truth. The *Nyāya* school adopted the doctrine of *parataḥprāmāṇya* in opposition, mainly, to the *Mīmāṁsaka* insistence on the self-evidential character of scriptural authority But the school did not carry out the doctrine thoroughly in application to all the *pramāṇas*. It would in fact be difficult to work out a theory of knowledge on the basis of 'proofs' (*pramāṇa*) none of which have self-evident probativeness (*svataḥprāmāṇya*). It will be seen later on, in treating of the '*pramāṇas*', that the notion of *pramāṇa* is subject to ambiguity, sometimes meaning 'proof', but more often 'instrument of apprehension'. It is this ambiguity which finds expression in the doctrine of *parataḥprāmāṇya*.

[3]There is parallelism of thought between the fivefold division of theories of error expounded by Vācaspati Miśra, and the discussion whether false opinion is possible in Plato's *Theætetus* 187 D. ff.

SECTION 5. THEORIES OF ERROR

Uddyotakara asks—What is error? His answer is that it is the cognition of 'that' in what is not 'that' (*atasmiṁs tad iti jñānam*)[1]. Vācaspati Miśra[2] adds that the question as to the nature of error is raised because philosophers hold different opinions about it (*parīkṣakāṇām vipratipatteḥ saṁśayaḥ*).

(*i*) *Theory that the object of erroneous judgment is merely subjective or ideal—ātmakhyāti.*

"Some say that error is cognition consisting in a presentation and making externality its object[3]." That is, error consists in projecting under the guise of an external thing what is really only an idea. This is the view of the idealistic school of Buddhism (*vijñānavādin*), and is known as the *ātmakhyāti*, or theory that the supposed external object is only the self (i.e. only our own 'ideas')

Vācaspati meets this view by asking what ground there is for saying that 'silver', in the erroneous judgment 'This is silver', is only an idea. The experience itself 'this is silver' declares 'silver' to

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[1] *NV* p. 26 l 4. *kaḥ punar ayam viparyayah?* cp. PBh p 199, l 13

[2] *NVT* p 58 last line, ff See Keith *ILA*, p 48 ff, and Gaṅgānātha Jhā's *Sadho Lal Lectures*, chapter III, p 51 ff.

[3] *svākāram bāhyatvaviṣayaṁ jñānaṁ viparyayaḥ*. The thought is awkwardly phrased here · much more clearly below, p 54 l. 3, *svākāraṁ bāhyatayā 'lambante vibhramāh*,—"illusions are grounded in a presentation under the guise of externality ". Ideas ' in the mind ' are mistaken for things ' without the mind '. As regards the rendering ' presentation ' for *svākāra* (i.e. *jñānākāra*), literally ' knowledge-form ' · some such rendering as ' presentation', or 'content of cognition', seems inevitable. The thought underlying the term *ākāra* is that thought itself assumes certain shapes or forms. Some hold that these shapes *correspond to external reals* (realists), *others* that they constitute the objects (idealists) · others again deny that thought has any 'shapes' (*nirākāra*. Cf. the passage in *Sābarabhāṣya* translated below, chapter II section 5, p 144) These three views we should express by saying that presentations or ideas *correspond to* objects; that presentations or ideas *are* objects; and that there are *no* ideas or presentations (Locke; Berkeley or Hume, and Reid).

belong to the non-ego (*anahaṅkārāspada*), and does not declare it to be 'within the mind',—for if it did the experience would take the form 'I am silver' (*anahaṁkārāspadaṁ rajatam ādarsayati, na cāntaram, aham iti tadā syāt*),—seeing that the *Bauddha* idealist identifies the self with ideas (*pratipattuḥ pratyayād avyatirekāt*). Perhaps the *Bauddha* will say that the apparent reference to a non-ego is illusory: knowledge is mistaken (*bhrāntaṁ jñānam*), and is grounded in a mere idea projected as an external thing (*svākāram eva bahyatayā 'lambate*): it is thus that its object, really only a content of consciousness, is referred to a non-ego (*tathā cānahaṅkārāspadam asya viṣayo jñānākāro 'pi*). (Thus the experience itself, ' This is silver', conceals the fact that 'silver' is only an idea. But—) we can learn from the sublating cognition (*bādhakajñāna*—' it is *not* after all silver ') that ' silver ' was only an idea (*jñānākāratā punar asya bādhakajñānapravedanīyā*). To this Vācaspati replies that if the *Bauddha* would put aside his idealistic presuppositions (*vaijñānikapakṣapātam parityajya*) he would see that what the sublating cognition denies is that ' silver ' is the form of the object before us (*purovartidravyākāratāmātram pratiṣedhati rajatasya*) · and it does not suggest further that 'silver' is only an idea (*jñānākāratām apy asyopadarśayati*). Perhaps it will be said that the merely ideal character of ' silver ' is established by implication as a result of denying that ' silver ' is actually present (*purovarttitva*), although the non-denial of the actual presence of the silver which we have seen in shops and elsewhere cannot be used to prove its ideal character[1] The answer to this is: whence comes this notion

[1]Reading, *ex conj*, *asyā atanniṣedhaḥ* for the textual *asyātanniṣedhaḥ*. *asyāḥ*, in this conjectural reading, will stand for *jñānākāratāyāḥ*. The meaning simply is that though the ideal character of the object does not emerge when experience does not contradict our judgments, it comes out clearly enough in a false judgment subsequently contradicted by experience.

of silver as existing 'within the mind', seeing that (by your own confession) it has not been previously so experienced[1]?

(ii) *Theory that the non-existent is the object of erroneous judgment—asatkhyāti*

"Others hold that (error is) cognition (which) has the non-existent for its object[2]". The passage in

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[1]*antaratvam anupalabdhacaram kutastyam*, i.e. the *Bauddha* idealist admits that in the primary experience silver presents itself *bāhyatayā*—as something 'without the mind'. There has then been no experience of silver *as only an idea*. How then are we to *infer*, from the contradictory experience, an internality or ideality of 'silver' such as we have never experienced?

In the commencement of this argument Vācaspati has said (p. 54 l. 4) that the ideality of 'silver' etc. is established either from the experience itself or as the result of inference (*jñānākāratvaṁ rajatāder anubhavād vyavasthyāpyate anumānād vā*. The text has *anubhāvād*). Having first shown that ideality is not *given* in the experience itself, in the present sentence he disposes of the suggestion that it may be *inferred*. The nature of the inference is indicated by the phrase used in the previous sentence—*arthāj jñānākāratāsiddhiḥ*—"the ideality of 'silver' is established from *implication*", that is, the process is that which the *Mīmāṁsakas* call *arthāpatti*: you are forced to suppose that 'silver' is ideal, in the case of an erroneous judgment, because there is no other way of explaining the facts. But neither the *Naiyāyika* nor his *Bauddha* opponent admit that *arthāpatti* is a separate instrument of truth: both alike reduce it to syllogistic inference, *anumāna*. And, regarded thus as a syllogism, the 'inference' that 'silver' is only an idea is certainly open to the objection which Vācaspati brings against it: the conclusion introduces a major term (ideality) the connection of which with the middle (contradiction of actual presence of 'silver' etc.) has never been experienced in parallel experiences (*sapakṣa*). Vācaspati is thus justified, from his own and his opponent's standpoint, in adding *na cānumānam atra prabhavati* (p. 54 l. 15) "inference is of no avail here".

The question remains whether all inference really can be reduced to syllogism. The question which Vācaspati asks—whence do we get the notion that false objects are 'only ideas'?—is a very pertinent question. But, somehow or other, we *do* get this notion. It may be a wrong notion. But it is a very convenient way of disposing of 'false objects', to relegate them to the limbo of mere ideality. And, in the absence of any other explanation of error, the implication or presumption (*arthāpatti*) that 'silver' (erroneously predicated of what is really nacre) is 'only an idea', will be the hypothesis which holds the field. If however, with the *mīmāṁsaka*, we can maintain that there *are* no 'false objects', we shall be able to dispense with any necessity for 'ideas'.

[2]*NVT* p. 54 l. 1—*anye 'sadviṣayaṁ jñānam*, see Keith *ILA* p. 49 'the nihilist doctrine of the *Mādhyamikas*, according to which all apprehension is of the non-existent (*asatkhyāti*), and is itself non-existence". As a matter of fact the *Mādhyamika* refused to make so definite an assertion as that of the non-existence of all things. His favourite formula is that of

which Vācaspati Miśra states this theory is as follows[1]. "Let us then follow the lead of the sublating judgment (i.e. the judgment 'after all this is *not* silver'), and say that erroneous apprehension has the characteristic of manifesting the non-existent. For the sublating judgment grasps the non-existence of the object of the thought 'silver' (*rajatajñānagocarasyāsattvam gṛhṇāti*). Nor is there any difficulty in a non-existent's being the object of cognition: for to be an *object* of cognition does not involve being a *cause* of cognition,—if it did, of course the non-existent could not be an object (since it cannot be a cause, of cognition or of anything else). But there is in knowledge a certain overflow or excess of efficacy, dependent on no other causes (*svakāraṇādhīnaḥ sāmarthyātiśayaḥ*), of such a nature that in virtue of it

Nāgārjuna's *Mādhyamikasūtra* I 7 *na san nāsan na sadasan dharmo nirvartate* He tries to keep an equipoise between four alternatives (*catuṣkoṭi*)—'is', 'is not', 'both is and is not', 'neither is nor is not' See *SDS*, p. 23 (=p. 23 in Cowell and Gough's transl) *atas tattvaṁ sadasadubhayānubhayātmakacatuṣkoṭivinirmuktaṁ śūnyam eva* Cf Poussin in *Muséon*, n s. vol. ii. p. 174 note 59. Gough translates: "The ultimate principle, then, is a void emancipated from four alternatives, viz, from reality, from unreality, from both (reality and unreality), and from neither (reality nor unreality)". The application of the *medius tutissimus* principle in their dialectic is perhaps a more likely explanation of the name *Mādhyamika* than that offered by the *SDS*, and rejected by Poussin *loc. cit.* p 177 note 68

We are here concerned with *asatkhyāti* as a theory of error primarily. But it is clear from the *SDS* that the *Bauddha* nihilist, like the *Bauddha* idealist, did not—and could not—distinguish his theory of error from his theory of truth The argument put forward in this passage of the *SDS* to support the formula *sarvam śūnyam*—all is void—is in fact (like the idealist's argument) an argument from the nature of erroneous judgments It is a piece of dialectic based on the analysis of negation of complexes (*viśiṣṭaniṣedha*). The judgment 'this is silver' (in the case where nacre is actually present) is admittedly false. But to say that it is false is to negate the complex consisting of this-ness (*idantā*, 'hocceity', in Gough) and silver-ness But in the case of a *viśiṣṭaniṣedha*, negation of a complex, it is impossible to deny part without denying the whole (the complex AB no longer exists, as such, if B is denied)—"A semi-effete existence is not admissible No one imagines that one half of a fowl may be set aside for cooking and the other half for laying eggs" (Gough). The 'thus' does not survive the denial of the 'silver'—because it is essentially a 'this' related to 'silver'.

The purport seems to be that a single false judgment is enough to knock the bottom out of the universe: because error tears asunder what can only take on the guise of reality *as a complex*. But error exists *Ergo*, nothing is real

[1]*NVT*, p. 54, l. 16 ff.

knowledge can make the non-existent, as well as the existent, its object (*yena santam ivāsantam api gocarayati*). Efficacy of the object is not required, since we can explain objectivity[1] from the bare efficacy of the cognition (*na ca viṣayasāmarthyam upayujyate, jñānasya sāmarthyamātrād eva tadbhāvasiddheḥ*). For just this reason (i.e. because objectivity is possible without an 'object' in the sense of a cause of the cognition), one school have asserted this very efficacy of manifesting non-existence, which belongs to erroneous cognition, to constitute the 'nescience'-nature (*avidyātva*) or 'inexpressibility' (*anirvacanīyatva*) of cognition[2]".

Vācaspati now[3] proceeds to criticise the *asatkhyāti*, the theory that error has the non-existent for its object, from the standpoint of the *Nyāya*.

"What is meant by saying that the object of error is the non-existent? Is it meant that the erroneous judgment *grasps the non-existent as existent* (*asat sadātmanā gṛhṇāti*, i.e. grasps non-existent silver as ex-

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[1]*tadbhāva=viṣayatā* 'its being so', i.e. its being an object, *viṣaya*.

[2]This is the *Vedāntin* theory *avidyā* and *anirvacanīya* being technical terms in that system. For a parallel to these concepts, see Plato, Resp V 477 A ff. *Avidyā* corresponds to opinion', δόξα: and its object, the *anirvacanīya*, corresponds to Plato's 'opinable', δοξαστόν. The object of *avidyā* is neither expressible as existent nor as non-existent: you cannot say that it *is*, nor can you say that it *is not* and so it is *anirvacanīya*. Similarly Plato says: οὐκ ἄρα ὂν οὐδὲ μὴ ὂν δοξάζει,—"one cannot conceive of them as either being or not being, as both being and not being, or as neither." [This is exactly the *Mādhyamika's catuṣkoṭi*]. The object of 'opinion' is τὸ ἀμφοτέρων μετέχον, τοῦ εἶναί τε καὶ μὴ εἶναι,— —between being and not being. It is therefore compared τῷ τῶν παίδων αἰνίγματι, to the children's riddle.

That there is kinship between the *Mādhyamika* school of Buddhism and the *advaitavādin* or absolutist school of *Vedānta* has often been remarked. *Vijñānabhikṣu* in the *Sāṁkhyapravacanabhāṣya* (16th century) calls the latter *pracchanna-bauddha*, 'Buddhists in disguise'.

[3]*NVT* p. 54, l. 22 *atredam ālocanīyam*, etc.

isting); or is it meant that *it is the existent that is grasped as another existent* (*sad eva sadantarātmanā gṛhṇāti*, i.e. existent nacre is grasped as silver), and that the object is called ' non-existent ' because the existent thing (nacre) does not exist as something else[1] (silver)? The former alternative must be rejected, because the man who wants silver does as a matter of fact direct his activities *on the nacre*, and not on ' non-silver ',—and he could not do this if his erroneous notion had as its object ' what is non-existent as silver ', instead of having the existent nacre as its object. Besides, how is it that we point with the finger at this actually present substance and say (when the sublating cognition has arisen) ' this is *not* silver ', unless it was *to this* (*tatra*) that the nature of silver had been wrongly assigned through the previous judgment? Then it must be the nacre, under the form of silver—in which form the nacre does not exist—that is the object of the erroneous cognition · and the cognition is said ' to have the non-existent for its object ' only in this sense that the (existent) nacre *does not exist as silver*[2]. With this our own view is in agreement: for of course the *Naiyāyikas* who hold the *anyathākhyāti* view of error (i.e. that the object of error is the existent appearing as other than what it is), do not hold that one existent thing *exists* as another existent (*sadantarātmanā sad abhyupagacchanti*). Such an admission would destroy the whole theory that the existent is cognised ' otherwise ' than as it exists (*anyáthety eva na syāt*). The upholders of the *anyathākhyāti* view have themselves said[3]: " what is apprehended otherwise (than as it

[1] *sataś ca sadantarātmanā 'sattvād asadviṣayam ucyate* This alternative of course amounts to the *Naiyāyika* or *anyathākhyāti* theory, as Vācaspati proceeds to point out.

[2] *atha śuktir eva rajatātmanā 'satīti tadākāratayā tām ālambamānaṁ mithyājñānam asadālambanam ucyate*, p 55, first line

[3] *yathāhuḥ anyathākhyātivādinaḥ tasmād yad anyathā pratipādyeta tan nirālambanaṁ jñānam asadālambanaṁ ca tad.* The citation is noted by the editor, Gaṅgādhara Śāstrī, in the list of unidentified quotations given in his preface. The quotation looks like a statement of the *asatkhyāti* view

is), is cognition without objective ground, cognition with non-existence for its object ". At this point[1] Vācaspati commences criticism of the *Vedāntin* view of *anirvacanīyakhyāti*, viz., that the object of erroneous cognition neither is nor is not.

(iii) *Criticism of the theory that the object of erroneous cognition is 'inexpressible', whether as existent or as non-existent. Anirvacanīyakhyāti .*

Vācaspati's criticism of this theory is as follows :—

" Nor can it be said that no account can be given (*anirvacanīyatva*) of the actually present substance in its character as 'silver',—seeing that at the time of the erroneous judgment it *is* designable (*nirvacanīyatvāt*) as existent, and at the time of the sublating judgment it *is* designable as non-existent. (i.e.)—It is not true that nothing can be said (*prathā nopapadyate*) of a non-existent of this kind : since the terms 'existent' and 'non-existent' are applicable to it (*sadasadbhyām upākhyeyatvāt*). And as for the 'phenomenal existence' (*prapañca*) of the absolutist (*advaitavādinām*), and the *Bauddha's* view that the universal and so on is nothing external, but a mere non-entity, and as to the doctrine that erroneous cognition is cognition which has this phenomenal existence for its object[3],—such a view is impossible · because that to which no term is applicable (*sarvopākhyarahitasya*) can be *like* nothing whatever, and

but no doubt it must be read with the qualifications suggested in this passage, i.e. the object is non-existent only in the sense of *not being* what it is cognised as being

[1]*NVT* p 55 l. 5—*na ca rajatātmanā*, etc.

[2]See note 2 p 63.

[3]This is no longer a theory of erroneous judgments about phenomena as contrasted with correct knowledge about phenomena · but a theory that all knowledge of phenomena is, as such, illusion The *Naiyāyika's* reply to it is that the very notion if error presupposes a criterion (which he calls 'likeness' i.e. the *semblance* of truth). If all knowledge is illusion, there is no truth of which error can be the 'semblance' : and so there can be no error.

error (as has been previously argued) has as the condition of its possibility *likeness* to something : and in the absence of the condition which makes a thing possible it is easy to see that the thing itself (i.e. error) cannot exist. Therefore the world of phenomena (which the *Vedāntin* regards as illusory) and the universal and other categories (which the Bauddha rejects as unreal) are in fact both real existences—they are not false (*asamīcīna*), and objects of ' nescience ' . . . and therefore also the theory that the object of error is ' inexpressible ' is not the true account.''

At this point *NVT*, p. 55, 1. 13) Vācaspati gives an account of the criticisms brought against the *Naiyāyika's* theory of *anyathākhyāti*,—that is, the theory that the object of error is an existent cognised ' otherwise ' than as it is. This criticism is used to introduce the *Mīmāṁsaka* theory of *akhyāti;* and it may therefore be supposed to be a criticism of the *Naiyāyika* from the *Mīmāṁsaka* standpoint primarily

(*iv*) *The Mīmāṁsaka theory of akhyāti,—error as non-apprehension*

A. Criticism of the *Naiyāyika* view.

" It may be (that the *Vedāntin's* theory of the inexpressibility of the object of error is open to the objections urged by the *Naiyāyika* above. But the *Naiyāyika* view is no less objectionable, for the following reasons). That the object appears otherwise than as it is, contradicts our consciousness (*samvidviruddha*)[1]. And error certainly cannot have for its objects things *simply as existent* (*sadbhāramātreṇālambanatvam*) If simple *existence* (*tanmātra*, i.e. *sadbhāvamātra*) were the

[1]Cf *NK* p 180 1 18 *idam rajatam iti jñānasya śuktikālambanam iti hi saṁvidviruddham. yasyāṁ hi saṁvidi yo 'rtho 'vabhāsate sa tasyā ālambanam rajatajñāne ca rajatam pratibhāti, na śuktikā* That is to say that nacre is the ground or object of a cognition which has silver for its object contradicts consciousness. The object that appears in consciousness is the object of that consciousness And it is silver, not nacre, that appears in the cognition of silver.

common object of all cognitions, then all things would be objects of every thought, and the result would be that each cognition would cognise everything (*sarvasarvajñatvāpatti*). Nor can it be said that what the cognition has as its object is the existent ***in so far as it is the cause of the particular cognition*** (*kāraṇatvenālambanatvam*). For the eye also, no less than the colour, is a cause of the cognition,—so that it would follow that the cognition (of colour) has the eye as its object[1]. And cognition could not have past and future things for its objects (—as it has—), seeing that past and future things, as no longer or not yet existing, could not be causes of present cognitions. Therefore the ground or object of cognition is the phenomenon, the thing as it appears (*tasmāt pratibhāsamānam ālambanam*). And, this being so, you would have to say that the presentation of silver has nacre for its object (*rajatapratibhāsaḥ śuktikālambanam iti*)—a position which it will be difficult to maintain!

Besides, the competency or efficacy (*sāmarthya*) of the eye and other sense-organs is for the production of ***right*** cognition: how should false cognitions arise through them[2]? *Śyāmaka*-seed, however it be treated, will not produce rice-plants. You may suggest that the eyes and the other sense-organs may give rise to erroneous cognitions when accompanied by defects (*doṣasahāya*). But this will not do. For defects impede the competency of causes, but they do not impose the competency of producing a *different* effect. *Kuṭaja*-grain, when parched, will not produce a *banyan*: it will merely fail to produce a *kuṭaja*. Besides, if the

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[1] *rūpādivijñānaṁ rūpādivac cakṣurādy api kāraṇam iti cakṣurādyālambanatvaprasaṅgāt*. The objection appears to be well taken. For it would drive the defendant to state his theory in the more precise form—'the object is that part of the cause of the cognition *which forms the object of the cognition*',—and, when so stated, the circle involved in the definition is apparent. You define the object as cause,—but you also define the cause by the object.

[2] The sense-organs are *pramāṇas*, i.e. *pramākaraṇa*, instruments of *knowledge*. How can they be instruments of *error*?

senses ever err in respect of their own objects, the result will be that we shall lose faith in them everywhere."

At this point[1] commences the account of the *Mīmāṁsaka* theory of *akhyāti*, i.e. the theory that error is inadvertence, a negative thing consisting in a *failure* to note.

B. Statement of the *Mīmāṁsaka* view.

"Therefore *all* cognition must be held to be correct cognition (*sarvam eva vijñānaṁ samīcīnam*). The meaning of this is as follows:—In the judgment 'this is silver' there are two cognitions, 'this' and 'silver', the former a primary experience (*anubhava*)[2] and the latter a memory. The 'this' is apprehension of barely an actually present substance (*purovarttidravyamātragrahaṇa*); because, as the result of a defect (*doṣavaśāt*) or impediment to apprehension, there is a failure to apprehend the specific universal (*sāmānyaviśeṣa*)[3] 'being nacre', which is resident in it (*tadgataśuktikātva*).

And, since this much only is apprehended, it generates through resemblance, by serial rousing of the 'mental impressions' (*saṃskārodbodhakrameṇa*), a memory of silver. And this memory, although essentially an apprehension *of the previously apprehended* (*gṛhītagrahaṇa* = a secondary experience), presents itself *simply* as apprehension (*grahaṇamātra*, as opposed to *gṛhītagrahaṇa*, = a primary experience); because the aspect of

[1] *NVT* p 55 l 26

[2] Dr. Gaṅgānātha Jhā notices the difficulty of rendering *anubhava*,—a term which covers all experience other than memory As it is contrasted with memory on the ground of the *secondary* character of the latter as the recall of a previous experience, 'primary experience' may serve as a rendering for *anubhava*. Dr Jhā translates 'direct apprehension',—with the warning that 'direct' here does not mean immediacy.

[3] *sāmānyaviśeṣa* is used here, as frequently, to distinguish the subordinate universal ('being something specific' e g 'being substance', 'being earth' etc.) from the *summum genus* 'being' (*sattāsāmānya*, or simply *sāmānya*) There was a certain amount of confusion in the usage of the term *sāmānya*—see Ui's *Vaiśeṣika Philosophy*, pp 85—87, 67, 70, 175, 180.

referring to the previously apprehended (*gṛhītatāṁśa*) has been filched* from the experience, in consequence of some 'defect' (which prevents us from noticing that it is really a memory, and not a primary experience; of 'silver'). And so, as a result of not apprehending the difference (*bhedāgrahaṇa*) in respect of nature and of object between the memory of silver and the primary apprehension of the actually present thing, the two cognitions,—'silver' (remembered) and 'this' (perceived), —although separate cognitions, nevertheless, through resemblance to the case of cognition which has as its object silver in actual contact with sense, set going the judgment of identity[1] and the reference to a common locus[2] which is expressed in the proposition 'this is silver'.

Sometimes, again, it is two primary experiences of which the separateness is not grasped. Thus when the conch is perceived as yellow, what happens is that the yellowness of the bile-substance residing in the emergent eye-beam is grasped (just as colour may be apprehended in a transparent crystal)[3] while the bile itself is not grasped: and the conch also, owing to a defect in the perception, is perceived barely as such (*svarūpamātreṇa*) without its qualities. Thus, as the result of failure to notice the absence of connection between this subject (the conch—which is really white) and this attribute (the yellowness—which really belongs to the bile), and because

*Cp. *NK* p. 180 l. 16 *tadityaṁśapramoṣam rajatasmaraṇam.*

[1] *abhedavyavahāra.*

[2] *sāmānādhikaraṇyavyapadeśa.* When an adjective qualifies a substantive, it is said to be a case of *sāmānādhikaraṇya.* So Pāṇini calls a *karmadhāraya* compound a *samānādhikaraṇa-tatpuruṣa*, I. ii. 42. In a compound such as *nīlotpala*, a blue lotus, both 'blue' and 'lotus' refer to the same *adhikaraṇa* or substrate: whereas in the ordinary *tatpuruṣa* compound such as *rājapuruṣa* king's man (official), 'king' and 'man' refer to different substrates.

[3] *bahirnirgacchannayanaraśmivartinaḥ pittadravyasya kācasyevātisvacchasya pītatvaṁ ca gṛhyate pittam tu na gṛhyate.* The idea is that as colour (of some adjacent object) is seen in a crystal, so is the yellow bile-s' ff seen in the eye-beam.

of a resemblance constituted by its being indistinguishable from the cognition of the yellow *cirabilva* tree, a judgment of identity and an assertion of community of *locus* takes place (i.e. we say that 'the conch is yellow'). And, as a result of the disappearance of the judgment of identity—the judgment which followed on failure to apprehend the separateness of the two cognitions 'conch' and 'yellow',—that judgment can be sublated by a discriminating cognition (*vivekapratyaya*) in the form 'this is *not* silver': and, this being possible, a place is found for the commonly accepted notion of the erroneousness of (some) cognitions. Thus we arrive at the position which may be stated syllogistically in the form: 'Even erroneous cognitions are true to reality (*yathārtha*), because they *are* cognitions,—like the cognition of a piece of cloth'[1]".

C. *Naiyāyika* criticism of the *akhyāti* theory

Having stated the *Mīmāṁsaka* theory, Vācaspati now[2] proceeds to the criticism of it.

"On the position thus taken up the following observations may be made. Every one agrees that the man who wants silver acts on the actually present object when the erroneous cognition of silver arises, and that he refers the 'this' and the 'silver' to a common *locus*. The question is whether he does this as a result of *not apprehending the difference* between the primary experience and the memory, and between their respective objects ('this' and 'silver') or as a result of *apprehending non-difference*[3] between them.

As to this,—an intelligent being does not act on absence of knowledge, 'non-apprehension'; but on

[1] Vācaspati brushes this inference aside as 'sublated' by perception *bādhita*, p. 56, below.

[2] *NVT* p. 56 l. 18 *evaṁ prāpte abhidhīyate*, etc.

[3] The two alternatives are *bhedāgraha* and *abhedagraha*.

knowledge. You may reply that what sets the man, who wants silver, to act on the actually present substance *is* knowledge or apprehension—apprehension, to wit, of the actually present thing[1]; the distinction of this apprehension from the cognition of silver in respect of nature and object not having been apprehended. But what do you mean by this? Is this 'apprehension of the actually present thing' an apprehension of *silver?* or is it apprehension barely of an actually present object as such? If it is apprehension *of silver*, then the man has apprehended the actually present object *as silver*,—and how is this not 'apprehending a thing otherwise than as it is'? (i.e. your view becomes identical with the *Naiyāyika* view). If on the other hand it is apprehension of the actually present thing that sets a man to act, then why should it need the assistance of a 'non-apprehension of separateness' (*ko bhedāgrahasyopayogaḥ*)? You may answer "The sight of a tree simply as such does not set acting the man who wants a *śiṁśapā*-tree, because in that case there is no cognition of a *śiṁśapā*· but in this case there *is* cognition of silver—the separateness of which is not apprehended—through the cognition 'this'[2]". But unless the silver is cognised *in* the actually present substance, or the actually present thing is cognised in the silver[3], the person who wants silver does not act *there*, that is, on the actually present thing. He might act anywhere whatever, instead of acting on this: for it is not then *through this* (the actually present thing) that silver is cognised But, you will say, it is the two separate cognitions, 'this' and 'silver', taking on the

[1]The text has *purovartivastugrahaṇarajatajñānād agṛhītabhedam.* But it is necessary to read *purovartivastugrahaṇam*, etc

[2]*asti tu iha rajatavijñānaṁ agṛhītabhedam idam iti jñānena* The precise relation of the thought 'this' to the thought 'silver' is not indicated by this ambiguous phrase, which merely asserts that the former thought is somehow instrumental to the latter. In the following sentence Vācaspati tries to force the opponent to a more precise formulation of this 'instrumentality'.

[3]*nanu rajatavijñānaṁ purovartidravye na vartate purovartijñānaṁ va na rajata iti.*

semblance of the single cognition ' this is silver ' because their separateness is not apprehended, that set the appropriate activity to work. If so, why do not the two cognitions also initiate a process of thought which would reveal their separateness—' this is silver ', ' that is nacre '? For if as a result of *non-apprehension of separateness* there arises likeness to the *apprehension of non-separateness*, then equally as the result of *non-apprehension of non-separateness* there will arise likeness to the *apprehension of separate* things[1]. (That is to say, simple failure of apprehension includes non-apprehension of *unity* of ' this ' and ' silver ', as well as non-apprehension of *difference* of ' this ' and ' silver ' : and if non-apprehension of difference amounts to a cognition of unity, 'this is silver', then non-apprehension of difference will amount to a cognition of difference, ' this is *not* silver—that is silver, but this is nacre '). And so the knowing subject has been placed in a very unfortunate position by these acute thinkers with their ultra-minute analysis[2] for he is drawn both ways at once—in the direction of action and in the direction of refraining from action—owing to the semblance both of apprehension of difference and of apprehension of identity (between 'this' and 'silver', i.e. he will have simultaneously the notion that it *is* silver, and the notion that it is *not* silver).

Be it so (retorts the *Mīmāṁsaka*). But you will have to assign a function to the subject's ' non-apprehension of difference ' even in the origination of your so-called *viparyayajñāna* or 'erroneous cognition' : otherwise

[1]*yady evam, tad rajatam iyaṁ suktir iti bhedāvabhāsivijñānavyavahāram api kasmān na pravartayataḥ? yathaiva hi bhedāgrahād abhedajñānasādṛśyam, evam abhedāgrahād bhinnavijñānasādṛśyaṁ api*

The *argumentum ad hominem* is justifiable, because the *Mīmāṁsaka* is appealing to a mere negative in his *akhyāti*. Mere non-apprehension can do nothing—or if it does anything there is nothing to prevent it from doing *everything*. ' Failure to notice ' will be as much non-apprehension of the one alternative as it is of the other.

[2]*pratipattā kaṣṭāṁ daśāṁ āveśitaḥ prājñāsaiḥbhir atisūkṣmadarśibhir* atisvyākhyayā.

it would come about that erroneous cognition might arise in the case of persons who *had* apprehended the difference (which is absurd). And so it can be said in your case too 'why should not *true* cognition arise from the other aspect of the non-apprehension, viz., from *non-apprehension of sameness* between this and silver, just exactly as *erroneous* cognition results from the one aspect of the non-apprehension, viz., from *non-apprehension of difference* between this and silver?' So that the argument which you use to confute *our* account of the process[1] will serve us to confute *yours*.

As the upholders of the theory of error as non-apprehension (*akhyātivādinaḥ*) have said: 'For those also who hold the theory of error as contrary cognition (*viparītakhyāti* = *anyathākhyāti*) error is dependent on the influence of non-apprehension[2] '.

Not so (answers the *Naiyāyika*). We have experience, in the case of the eyes and other sense-organs, of causes of cognition the relation of which to their effects (colour, in the case of sight) *is not apprehended*: but we cannot conceive of *conscious* judgments which are not conditioned by apprehension[3]. Now where thought is a condition precedent of a cognition, there is no room for your 'non-apprehension of difference'. This seems to us the correct view. If the fact that we also fail to apprehend the *absence* of difference is an impediment to the judgment ('this is silver'—a judgment based, as you

[1] *tatra yas tava parihāras so 'smākaṁ vyavahāravyapadeśayor bhaviṣyati.*

[2] Noted by the editor as an unidentified quotation.

[3] *naivam, jñānahetūnām ajñātarūpakāryasambandhānām cakṣurādīnāṁ darśanāc, cetanavyavahārāṇām tu abuddhipūrvakāṇām apratīteḥ.*

Vācaspati teaches that there are two kinds of cognition—cognition which comes from previous cognition, and cognition which does not. Sense-perception belongs to the latter category. Now in the case of *conscious* judgment, i.e. judgments formed by a conscious process, it is not possible to treat 'non-apprehension of differences' as a cause of the resultant cognition: for being conditioned by precedent cognitions the conscious judgment cannot be regarded as conditioned by a precedent 'non-apprehension'.

Mīmāṁsakas suppose, on failure to apprehend the difference between 'this' and 'silver'),—then whence comes a judgment which is as a matter of fact confined to one of the two alternatives (i.e. which categorically asserts that 'this is silver', or that 'this is not silver')? The conclusion then is that the so-called "non-apprehension of difference" is simply the illusory attribution of a predicate to a subject (*samāropa eva bhedāgraha iti siddham*).

(*v*) *Formal statement of the Naiyāyika's anyathākhyāti theory of error, and reply to certain criticisms.*

"The outcome of the discussion is this. The cognition of 'silver' and so forth has the actually present thing for its object; because it determines the man who wants silver to act on just this thing (*tatra niyamena pravartakatvāt*); and any cognition which determines the knower's activity to any particular thing has that thing as its object,—as in the example (accepted as such by both parties to the discussion) of a *true* cognition of silver; and this (erroneous cognition of silver) does so (i.e. directs activity on the actually present substance)[1]; therefore it is so (*tasmāt tathā*, i.e. it has the actually present nacre as its object).

As to the criticism[2] that the nacre as such is not sensibly present and therefore cannot be the object of the erroneous cognition of 'silver' (*anavabhāsamānā śuktikā nālambanam iti*),—do you mean that *being nacre*

[1]This is a statement of the *siddhānta*, or established *Naiyāyika* doctrine, in the form of a syllogism or *pañcāvayavavākya*. The only difficulty about the statement is the insertion at this point of the words *na tathā caitat* ' (I have omitted the words in translating). This is the formula for the *upanaya* or fourth member of syllogism when the syllogism is stated in negative form i.e. as an argument from a *vipakṣa* or negative example. No negative example has been given, and so the negative formula for the *upanaya* comes in awkwardly · but all that it is meant to indicate is that the argument is of the *anvayavyatirekin* type, and so would admit of a negative form also.

[2]See (iv) A above, where the criticisms here met are stated. The particular criticism meant here is stated there in the form *rajatapratibhāsaḥ śuktikālambanam*. See p. 67.

(*śuktikātva*) is not the object of the cognition of 'silver'? If you mean this you are only proving something which is already admitted (*siddhasādhana*). Or do you mean that the actually present shining white substance as such is not the object of the cognition? If you mean this, it is not true that *this* is not sensibly present[1]: for we point with the finger at the actually present thing, the 'this'. Another objection which was made depended on the assertion that 'defects impede the competency of causes, but they do not impose the competency of producing a different effect.[2]' But experience shows cases of the production, by causes which have been impaired, of new effects, through counter-action of the natural effects. For instance, the seed of canes burnt in a forest-fire produce banana shoots · and the digestive powers impaired or affected by '*bhasmaka*' or morbid appetite can deal with increased quantities of food and drink[3].

And the inference to the effect that 'erroneous cognitions are true to reality, because they are cognitions,[4] ought not to be put at all, seeing that it is invalidated (*apahṛtaviṣaya*, i.e. *bādhita*) by a sublating cognition based on perception, viz., in the judgment 'this is *not* silver' (which proves the original cognition of silver not to have been true to reality).

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[1] The text has (p 57 l 21) *uttarasminnavabhāsamānatvam asiddham.* But the sense clearly requires *anavabhāsamānatvam* and I have read this

[2] P 67 above.

[3] The first example is taken from unnatural history, and the second is hardly an example of a 'different' effect—although the 'defect' increases instead of impairing the competency of the cause

[4] See above, p 70 A syllogism of which the 'Proposition' is counter to perception or authority is already debarred from being a valid inference, and need not be further examined It is obviously easy to misuse this notion of '*bādha*' · and the substitution of *pañcarūpopapannatva* (by the addition of *bādha* and *satpratipakṣa*, sublation and neutralisation) for the *trairūpya* (the three canons) as a criterion of argument seems unfortunate (though, so far as *bādha* is concerned, it has the authority of the older commentators on *Nyāya*, viz., Vātsyāyana and Uddyotakara, and appears in Praśastapāda under the guise of *pratyñābhāsa*—also, inconsistently, in Buddhist logic under the same guise). In the present instance the appeal to 'sublation' appears *to beg the question for the Mīmāṁsaka's* whole point is that the judgment 'this is not silver' does *not* affect the truth to reality of the original 'this' and 'silver'.

And (finally), in spite of the fact that the semblances of proof[1] go astray, we still place reliance on proof itself. This is what is indicated in the 'sentence' embodied in the *Bhāṣya*[2] which states that practical achievement of objects depends 'on the grasping of the object as the result of (and through)[3] proofs or instruments of valid cognition.'

[1] *pramāṇābhāsa* means fallacious proof, as *hetvābhāsa* means the special kind of fallacious proof consisting in a fallacious reason. It has been noted above that 'proof' is not a correct rendering of *pramāṇa*. but the paraphrase 'instrument of valid cognition' is (though more accurate) too inconvenient.

[2] The first of the three *vākyas* embodied in the *Bhāṣya* on *NS* I. 1. 1. See p 49 above.

[3] *pramāṇataḥ* The termination is properly ablatival. But, as Uddyotakara points out, the force of the instrumental case also is implied here.

[4] The criticism last answered is that last put by the *Mīmāṁsaka*, p. 68, above.

This concludes the discussion of the theories of error, which extends from p. 53, last line, to page 57, last line, in the *Tātparyaṭīkā* I have translated the passage *in extenso*, because it serves as a *locus classicus* for the topic, and because (so far as I am aware) the *Tātparyaṭīkā* has never been translated

CHAPTER II

PERCEPTION

Indriyarthasamnikarsotpannam jñanam avyapadeśyam avyabhicari vyavasayatmakam pratyaksam

Is the object in perception real?—Can perception be erroneous? (first part of the *vrttikara's* argument and the epithet *avyabhicari* in the *Nyaya sutra* definition) —The argument from dreams against the reality of perceptual objects (second part of the *vrttikara's* argument) —The dialectic of whole and part (*Nyayasutra* IV 1 4—37) Does the object dissolve under analysis?—Is thought distinguishable from the object of thought? (third part of the *vrttikara's* argument and the epithet *avyapadeśya in the Nyayasutra definition*) —Can perception be doubtful? (the epithet *vyavasayatmaka* in the *Nyayasutra* definition) —The nature of the contact in perception (*indriyarthasamnikarsa* of the *Nyaya sutra* definition) —The two moments of perception and the modes of contact (Praśastapāda's doctrine) — Simple apprehension and the perceptual judgment—*nirvikalpakajñana* (Śridhara's polemic against Dinnaga's account of perception) *Ksanabhangavada* —The universal as real —Recollection Attention and Association

SECTION 1 REALITY OF THE OBJECT IN PERCEPTION

Perception is the one instrument of knowledge admitted by all schools alike[1] The obvious conception of a contact between sense-organ and object (*indriyārthasamnikarsa*) was the starting point for the development of the doctrine and appears in the

[1]For the ancient materialist school (*Carvāka's* or *Lokāyata's*) reject all other sources of knowledge even inference (*SDS* chapter 1), and the Buddhist sceptical school (*Śūnyavadins or nihilists*) although in a certain sense rejecting all means of knowledge, nevertheless accept perception and inference as practically valid

Nyāya, Vaiśeṣika and *Mīmāṁsā sūtras*[1]. But the ambiguous character of the 'object' suggested doubts as to its reality at a very early period: so that the defence of the validity of perception assumes at a very early stage the form of a 'refutation of idealism'. An early statement[2] of this refutation is fortunately

[1] *NS* I i 4 *indriyārthasaṁnikarṣotpannaṁ jñānam avyapadeśyam avyabhicāri vyavasāyātmakaṁ pratyakṣam.* "Perception is knowledge arising from contact of organ with object: it is independent of verbal expression, unerring, and has the form of conviction." *VS* III i 18 *ātmendriyārtha-saṁnikarṣa*, and III, ii. 1 which adds *manas* as a fourth factor in the contact which is the condition of cognition. Praśastapāda's *catuṣṭaya*, or four factors in the contact which is the condition of some kinds of perception, seems to derive from these *sūtra's* (There is no formal definition of perception in the *VS* The fourfold contact of soul, sense-organ, internal organ, and object is said to condition pleasure and pain in *VS* V. ii. 15 *ātmendriyamanortha-saṁnikarṣāt sukhaduḥkham* That is why, as Uddyotakara explains, the word *jñānam*, cognition, is inserted in the *NS* definition of perception). There are several passages in *VS* which refer to perception, and Praśastapāda's account of it is partly derived from these. A list of these passages is given by Faddegon, p 284, with Nand Lal Sinha's translation.

The reference in the *Mīmāṁsā Sūtra* is I i 4—*satsamprayoge puruṣasyendriyāṇām buddhijanma tat pratyakṣam, animittam vidyamānopalambhanatvāt.* "Perception is the arising of knowledge when a man's senses are in contact with reality. It is not a means (of knowing duty) as it apprehends what now is". Uddyotakara (*NV* p. 45 l. 10) quotes the first part of this *sūtra* and notes that the *Mīmāṁsaka* commentators themselves would agree with his criticism of it as an inadequate definition, Their position, in fact, is that it is not a definition, although the '*vṛttikāra*' attempted to treat it as such even emending the text of the *sūtra* to suit his interpretation.

[It is worth noting that Śabara in his comment here uses language which suggests that he had the definition of the *Nyāya Sūtra* in mind: e.g he substitutes the term *saṁnikarṣa* for the *samprayoga* of the *sūtra*: and his *tatpūrvakatva* (=dependence of inference on that, i e, on perception) seems an echo of the word *tatpūrvakam* in *NS* I i 5]

[2] Śaṁkara's classical refutation of idealism in his commentary on *Vedānta Sūtra* II, ii. 28—32 is at least four centuries later. Jacobi has argued in an article on the *Date of the Philosophical Sūtras* (*JAOS* xxxi 1911) that the early passages in the *sūtras* and in Śabara's *Bhāṣya* and the *Nyāya-bhāṣya* which appear to refute idealism are not really refutations of idealism (*vijñānavāda*) but of nihilism (*śūnyavāda*): and that Kumārila is wrong in interpreting half of the present passage in Śabara as directed against the *nirālambanavāda* (i e. *vijñānavāda*), the truth being that the whole is directed against the *śūnyavāda*. Jacobi's argument appears to be justified as against Stcherbatsky's view that these passages in the earlier *sūtras* and *bhāṣyas* have in view the *vijñānavāda* or idealist doctrine as promulgated by Asanga and Vasubandhu, and are therefore relatively late. But it seems clear that, though the *śūnyavāda* or nihilist doctrine was historically prior to the developed idealism of the *vijñānavāda* (which was in fact a watering down of the pure gospel of nihilism), yet the doctrine that ideas have no objects beyond themselves was, or became, a moment in the nihilist dialectic, logically prior to complete

preserved in Śabara's *Bhāṣya* on[1] the *Mīmāṁsā Sūtra*, and forms a convenient preface to the doctrine of perception.

The '*vṛttikāra*'s' refutation, embodied in Śabara, falls into three parts each of which meets a distinct difficulty: and the first and third parts deal with the two difficulties which, according to Vātsyāyana's interpretation, led to the insertion into the *Nyāya Sūtra* definition of the two words *avyabhicāri* and *avyapadeśyam*[2]. The second part meets the 'idealistic' argument from dreams which is dealt with in a later section of the *Nyāyasūtra* in the course of a polemic against Buddhist views[3]. The three difficulties are (1) the existence of erroneous 'perceptions' side by side with true perceptions; (2) the existence in dreams of 'perceptions' which admittedly have no basis (*nirālambana*) in an external object present to sense, and (3) the impossibility of characterising (*vyapadiś*—) cognitions without reference to the *objects* cognised, so that thought without things

scepticism (as it was historically prior in the history of English philosophy, Hume building on Berkeley's premises). Kumārila is thus justified in saying that it is after setting aside the reality of the object that the supposition of a similar unreality in the idea itself is made · and that Śabara in his *Bhāṣya* has undertaken to examine the reality or unreality of the external object because this is common to both views (idealism and nihilism) and because it is the basic doctrine (*Śloka Vārtika*, *nirālambanavāda*, verses 15-16)

[1]The *Mīmāṁsā* is not really a philosophical work but a system of exegetics. But the first section of the first chapter (commonly called the *tarkapāda* or logical section) of Śabara's *Bhāṣya* deals with certain logical topics (pp. 1—36 in the Bibl. Ind. edition), and has an important place in the history of Indian thought inasmuch as it is the basic text of the two distinctively philosophical *Mīmāṁsaka* schools founded by Prabhākara and Kumārila. The latter's Ślokavartika is a comment on this section of the *Bhāṣya* of Śabara. Śabara fortunately quotes a long passage from an earlier commentator (the variously identified anonymous '*vṛttikāra*') which comprises—as Jacobi has shown, *loc. cit.*,—the refutation of idealism or nihilism. Jacobi identifies the argument of this passage with that of *Vedānta Sūtra* II. ii. 28—32 (but not with Śaṁkara's interpretation of that passage) and with that of *Nyāya Sūtra* IV. ii. 21 *seq.*

[2]The *vṛttikāra* passage commencing *Ś. Bh.* p 9 l. 11 is so closely parallel to Vātsyāyana's difficult exposition of the word *avyapadeśya* in *N. Bh.* p. 12 l 8, p 14 l 6, that the two passages are mutually explanatory.

[3]*NS* IV ii. 31.

seems empty, void, or nothing (*śūnya*)[1]. And, as things have already been shown to be unreal, the paradoxical conclusion emerges that everything is void-and-nothing (*śūnyavāda*).

A. FIRST DIFFICULTY

SECTION 2. PERCEPTION AND ERROR

The argument in Śabara is as follows:—The opponent says that the means of cognition need examination, because they sometimes err (*vyabhicārāt parīkṣitavyam*). "For inasmuch as mother of pearl has the look of silver, thereby perception errs; and inference and the other means of cognition err because they are based on perception." It is replied: "This is not so. That which is really perception does not err; and what errs is not perception". The opponent asks for a definition of perception so understood, and the *vṛttikāra* answers with an amended version of the *sūtra*:—*tatsamprayoge puruṣasyendriyāṇām buddhi-janma sat pratyakṣam*—"When a man's sense-organs are in contact with *that*, the arising of cognition is

[1]The three difficulties, and the three parts of the 'refutation', are accordingly treated in three distinct sections by Kumārila in the *Ślokavārtika*, viz.—(*a*) verses 17—26 of the section *Autpattikasūtra*, which are separated under the title *Vṛttikāragrantha* (Kumārila regarding this part of the argument only as a citation of the *Vṛttikāra's* view). (*b*) the two hundred couplets of the *Nirālambanavāda* section (*c*) the two hundred and sixty-four couplets of the *Śūnyavāda* section (But Kumārila treats specifically of perception in the two hundred and fifty-five couplets of the section *Pratyakṣa-sūtra*). It has been noted above that the recognition of the second part of the refutation as dealing with a distinct 'idealistic' moment in the opponent's argument does not imply that the passage refers to the school of Buddhist idealism (*vijñānavāda*) which developed later than the *śūnyavāda* school. The *Sarvadarśanasaṁgraha* distinguishes, in complete nihilism (*sarva-śūnyatā*), the two elements of annihilation of the external (*bāhyārthasya śūnyatvam*) and annihilation of the internal (*antarasya śūnyatvam*). It represents the original doctrine as comprising both elements, and says that the Idealists (*Yogācāras* i.e. *Vijñānavādins*) accepted the former but refused to accept the latter.

true perception''. In other words, perception, properly so called, is cognition which has as its object the very thing with which the sense-organs is in contact (*yadviṣayakaṁ jñānam, tenaiva samprayoge*[1]). The opponent asks: "How is it known that in the one case (i.e. that of real perception) the organ is in contact with an object which is the object-as-cognised, while in the other case (that of error) it is in contact with something other than the object-as-cognised? A man who apprehends silver where there is actually mother of pearl thinks that his visual organ *is* in contact with silver''. The reply is that it is known when a conflicting cognition arises, so that the man says to himself 'this was a mistaken cognition and arose when the organ was actually in contact with something different.'—Yes, but how could it be known before the conflicting cognition arose? since at that time there was nothing to distinguish a true perception from an erroneous apprehension.—It is answered that false cognition arises when either the organ is affected by obscurities or the object by impediments to perception such as minuteness. Contact of organ and object is the cause of (true) perception, while defects affecting either factor (organ or object) are the cause of false apprehension.—Yes, but how is it known that defects are or are not present? The answer is: "If after looking for defects carefully we do not find them we accept the experience as not impaired by defects: because there is no proof that it is so impaired[2]''.

[1]Cf the later *Naiyāyika* characterisation of true cognition as *tasmiṁs tad iti jñānam*—"knowledge of that *as* that". Kumārila (*Śloka-vārtika*, *Pratyakṣasūtra*, 1. 42) explains *prayoga* as operation (*vyāpāra*)—not necessarily implying contact. But he appears to hold that the *Sāṁkhya* explanation of perception as contact had not been shaken by *Bauddha* criticisms.

[2]The *onus probandi* is thrown on the doubter of the validity of perception. The mere fact that error exists does not carry with it the implication that there is no truth.

Vātsyāyana, commenting on the word *avyabhicāri* in the definition of perception given in the *Nyāya Sūtra*[1] answers the same objection to the validity of perception in the same way[2].

"In the summer the sun's rays commingle with earth-warmth and become tremulous. These coming in contact with the visual organ of a person at a distance,[3] the cognition of water arises from contact of organ and object. And (as it 'arises from contact of organ and object') it would turn out to be perception" (and so perception, which is supposed to be a *pramāṇa*, an instrument of *pramā* or truth, is an instrument of error).

"It is with reference to this possible objection that the word *avyabhicāri* is introduced into the definition. Cognition of 'that' in what is not that (*atasmiṁs tat*) is characterised as *vyabhicāri*: while cognition of 'that' in what *is* that is *avyabhicāri*, non-erroneous. Perception is non-erroneous cognition[4]".

The first phase of the discussion of error in perception may be regarded as ending with the limitation of the name perception to *true* cognitions of sense. But obviously the difficulty can recur in an acuter form as soon as anaylsis reveals the distinction between the 'bare impression of sense' and 'fictions

[1] It seems clear that *MS* I. 1. 4 was intended as a definition of perception and that *NS* I. 1. 4 belongs to a later time when the inadequacy of the *Mīmāṁsā* definition had been realised. Vātsyāyana's interpretation of *NS* I. 1. 4 appears to represent truly the meaning of the *sūtrakāra*: and the general similarity of his point of view to that of the '*vṛttikāra*' in Śabara indicates that they belong to the same phase of thought.

[2] *NBh.* p. 14 l. 6 ff.

[3] The person is at a distance, but not his 'visual organ': for this is not the eye but the visual light or ray which goes out and comes into actual contact with the object. But if it has to travel far to the object some sort of dispersion affects it and impairs its efficacy.

[4] So too the Buddhist describes it as *abhrānta* which = *avyabhicāri*. But his addition of *kalpanāpoḍha* transforms truth of perception into novel shapes

of imagination': for the application of the formula *tasmin tad iti jñānam*—'knowing that *as* that'—is seen to be less simple than it looked at first when the 'ideal element' in perception is insisted on. The discussion then passes into another phase: a phase which may be said to crystallise in the term *kalpanāpoḍha*, "stripped of ideas," by which Diṅnāga describes pure perception.

B SECOND DIFFICULTY

SECTION 3. PERCEPTION AND DREAMS (IDEALIST ARGUMENT)

The second part of Śabara's argument[1] is the part to which the appellation of a refutation of idealism may most appropriately be given, the analogy between perception and the baseless fabric of our dreams being in the characteristic vein of idealism.

The objector argues: "All ideas are without external objects, like dreams (*sarva eva nirālambanāḥ svapnavat pratyayāḥ*). An idea has no ground in external objects: reality (*svabhāva*) is falsely attributed to a dream; and the waking person's apprehension of 'a post' or 'a wall,' too, is no more than an idea (*pratyaya eva*); and therefore it, too, is not grounded in any external object (*tasmāt so 'pi nirālambanaḥ*)".

It may be said in reply:—The waking man's apprehension of a post was perfectly certain (*suparin-iścita*): how shall it prove false?—But the apprehension in the dream was perfectly certain in exactly the

[1]Both this and the third part of Śabara's argument (*Śābarabhāṣya* p. 8 l. 22 to p. 9 l. 11, and p. 9 l. 11 to p. 10 l. 10) are translated by Jacobi in the article in *JAOS* xxxi above referred to Keith gives an account of Śaṁkara's parallel refutation in *Buddhist Philosophy* (Oxford 1923) p. 265. See also Thibaut's translation of the *Vedāntasūtra* and Śaṁkara's Commentary in *Sacred Books of the East*, v. XXXIV, pp. 418—428.

same way: prior to waking there was no difference in this respect.—But there *is* a difference, for dreams are found to be erroneous, while error is not found in the waking cognition.

The opponent retorts that his point is that error *will* be found in waking cognition, seeing that the waking cognition resembles dream-cognition (*tatsāmānyāt*). If the dream-cognition is false *because it is an idea* (*pratyayatvāt*), the same must be true of waking-ideas. The mere fact of having an idea is enough to establish falsity,—and it is impossible to say that waking-cognition is *other than an idea*[1].

The answer to this is that the falsity of dream-cognitions is known from something else than from their being ideas, namely from their conflicting character. And if it be asked 'whence comes this conflicting character?' the answer is that it comes from the impaired efficacy of the internal organ in sleep. Sleepiness is the cause of the erroneous character of dream-ideas. Therefore a waking person's ideas are not erroneous (since then the internal organ is not thus impaired).

To the objection that when a person is awake, too, there may be defects in the instruments of cognition which cause falsity of ideas, the answer is that if there were such defects they would be known.—As for the objection that at the time of having the dream-ideas the impairment of the internal organ is not realised, though present, the answer is that on waking the person realises that his internal organ was overcome with sleep.

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[1]Jacobi takes *tathābhāva* to mean 'being so', i.e 'being true'. I have taken it as standing for the *mithyābhāva* of the preceding clause. He reads the textual *pratyayatvāt*, instead of the variant reading *pratyayāt*, which I adopt.

SECTION 4. DIALECTIC OF WHOLE AND PART

The treatment of the dream-argument in the *Nyāya* is confined to four sūtras (*NS* IV. ii. 31-34) and forms a small part only of the general polemic directed against the Buddhist denial of reality (*NS* IV. ii. 4-37). The general purport of the sceptical dialectic which this passage as a whole meets is perhaps best described in a couplet[1] found in the *Laṅkāvatāra Sūtra*—

buddhyā vivicyamānānām svabhāvo nāvadhāryate
ato nirabhilapyās te niḥsvabhāvāś ca darśitāḥ[2].

[1]The resemblance between the language of this couplet and that of *NS* IV ii. 26—*buddhyā vivecanāt tu bhāvānām yāthārthyānupalabdhis*, etc — is pointed out by Vidyābhūṣaṇa *HIL*, p 46 But the *Lankāvatāra* shows prophetic knowledge of things which happened long after the latest possible date for the composition of the *Nyāya Sūtra*, as appears from Vidyābhūṣaṇa's account of it in *JRAS* 1905—see Keith *ILA*, p 23. Vidyābhūṣaṇa draws attention to similar parallelisms between Nāgarjuna's *Mādhyamika Sūtra* and the *Nyāya Sūtra* (*HIL*, p. 46, see Keith *ILA*, p 23) But any inference as to the chronological relations of these works has to take into account the (improbable) supposition of later interpolations in the *Nyāya Sūtra* and also the (probable) contingency pointed out by Gopināth Kavirāj in pp 12-18 of his introduction to Gaṅgānātha Jhā's translation of the *Nyāya*—that 'tags' pass on from author to author in much the same phraseology, and that such 'tags' may be much earlier than the work in which we first happen to meet with them Thus one of the parallelisms (between *NS* IV. ii 32 and *Mādhy. Sūtra* VII. 34=p 177 of Poussin's edition) is parallel again to Patañjali's *Mahābhāṣya* on Pāṇini IV. i 1 (Kavirāj, *loc. cit.*) So that inference is precarious See next note also

[2]This is the form in which it is quoted in the *Sarvadarśanasaṁgraha* (chapter on *Bauddha system*); but in the *Lankāvatāra Sūtra* itself the second line runs—

tasmād anabhilapyās te niḥsvabhāvāś ca deśitāḥ.

This occurs at II 175 and again at l. 167 of the long verse section which ends the book (p 116 and again p 287 of Bunyiu Nanjio's edition, Kyoto, 1923). Cf. the phrase *buddhyā vivicyamānam* in a line occurring at II 198, repeated in the concluding section l. 374 It is in this phrase alone that parallelism to *NS* IV ii 26 is to be found. And the phrase seems to be a 'tag' which would be found in other works as well . and this being so the suggestion that the *Nyāya Sūtra* echoes the language of the *Laṅkāvatāra* would seem to be groundless for the other parallelism which Vidyābhūṣaṇa refers to (*NS* III ii 11 and *Laṅk.* VI. 10) is even less significant than this as evidence of connection. The suggested parallel between *NS* IV. ii. 32 and *Mādhy. S.* VII. 34 is again a tag found in a score of passages in *Laṅkāvatāra*.
And I think that other supposed "*verbatim* quotations from the *Mādhyamika Sūtra*" are in the same way 'tags'. If we could be sure that Nāgārjuna was the first formulator of these formulæ the case would be different. As it is, all that can be said with safety is that the *Nyāya Sūtra*

"When things are analysed by the mind no reality is found in them. Therefore they are said to be 'inexpressible' and 'without reality'." When we start to analyse the supposed external object in the hope of finding what it really is in itself—its *svabhāva* or essence—we find that it disappears under analysis. First we try to think of the thing as a composite Whole (*avayavin*, a possessor of parts): and the *Nyāya Sūtra* has maintained in a previous passage (II.i.33 seq.) that the whole is something more than the parts, principally on the ground that otherwise perception would altogether be impossible—component parts being ultimately atoms, which are imperceptible; and that it is impossible to arrive at a perceptible by summing up imperceptibles[1] In the present passage (IV.ii.4-17) the *Bauddha* arguments against the reality of the whole are first reviewed. If the parts reside in the whole do they reside in the whole of the whole or in parts of the whole? The former alternative is absurd, the latter amounts to saying that the parts reside in themselves, i e. not in the whole And if the whole resides in the parts[2], does it reside as a

repeats the formulæ of Buddhist *śūnyavāda* philosophy If and when we can settle the period at which these formulæ first became current we shall have fixed the *terminus a quo* for the composition of these passages in the *Nyāya Sūtra*. But not even then for the composition of the whole *Sūtra*, perhaps For there are certain indications of dislocation at *NS* IV i 3, felt by the commentators (see Gaṅgānātha Jhā's footnotes to p 159, Vol IV of his translation).

[1]Compare Leibnitz's argument for '*petites perceptions*'

[2]The *sūtrakāra's* own position is said to be that the whole resides by relation of *samavāya* in the parts. The whole is a constituted effect, the parts its constituent cause. The constituted resides (*samaveta*) in its constituents This is the commentators' explanation, based on the doctrine of *samavāya* imported from the *Vaiśeṣika* system. Taking the present *sūtra* passage at its face-value, however, it seems that the *sūtrakāra* intends *sūtra* 11 as an answer to both alternatives, i e he means that the questions (*a*) whether the parts reside in the whole of the whole or in its parts (*b*) whether the whole resides in the parts as a whole or by parts, are both questions which ought not to be asked.

In this connection the interpretation of IV. ii. 3 is important. On the face of it the *sūtra* denies the reality of wholes: though only by implication *tannimittam tv avayavyabhimānaḥ*—"the cause of these defects (lust, etc.) is the conceit of wholes", i.e. if men conceived of women as mere aggregates

whole in each part, or by parts in the parts? The former alternative is absurd, the latter destroys the wholeness of the whole.—The question is not a possible one (*apraśna*) answers the *Naiyāyika*: for it is absurd to introduce *into the whole itself* the distinction between whole and parts which is involved in asking whether the parts reside in *the whole of* the whole, and whether the whole resides *as a whole* in the parts.—As to the argument which the *Naiyāyika* has used to establish the reality of wholes, viz., that otherwise perception would be impossible, the opponent suggests that the supposed perception of the whole is really the confused perception of the parts, as in the perception of hair (when the separate hairs are not distinctly seen). The answer is that distinctness and indistinctness of perception are always relative to the perceptible: and the notion of indistinct perception of the imperceptible atoms is absurd[1]. So that perception would be impossible unless the whole were something more than a cloud of atoms. But the opponent's dialectic is based upon an

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of unpleasant physical constituents, bones and blood etc, there would be cessation of desire. The commentators say that this has no reference to the *reality* of wholes, but merely teaches a useful moral device. And yet, if the whole *is* a reality, human nature has a retort ready for the moralist So that it seems just possible that IV ii 3 really does belong to a phase of *Naiyāyika* doctrine which had not yet adopted the characteristic teaching of the reality of wholes In that case the passages II i 33—36 and IV. ii 4—17 would have to be considered later additions—and this would lend colour to the view that the whole of the passages polemising against Buddhism (II i 32—36 and perhaps 39—43, III ii. 11—17, IV. i 34—40 and 48, IV ii 4—37) are later additions That there is a certain dislocation at IV. ii. 3 has already been remarked and it may be added that IV ii. 38 resumes the topic of *tattvajñāna* broken off after IV ii 3 See Keith *ILA*, p 25, second half of footnote 2; Vidyābhūṣaṇa's translation of *Nyāya Sūtra* (in *Sacred Books of the Hindus*, Allahabad), introduction p x, and his *HIL*, pp 46—50 Vidyābhūṣaṇa's attempt to distinguish 'Gautama' from 'Akṣapāda', and his assertion that Vātsyāyana interpolated into the *sūtras* the passages dealing with Buddhism, need not be taken seriously. On the other hand it is likely that the *Nyāya Sūtras* grew rather than were made, and that their final form (which *may* have been achieved in the third century A. D.) is a final redaction and not a first composition

[1]Perception does not function beyond its proper sphere (*svaviṣayānatikrameṇa indriyasya pravṛttiḥ*). And the imperceptible is beyond the sphere of perception, indistinct or distinct.

appeal to the very perceptual experience which it would thus render impossible : and so it is suicidal.

In the next section the opponent proceeds to attack the reality of the concept of *parts*.

The dialectical difficulties about part and whole would continue up to a total disappearance of the supposed object[1]. You may try to avoid this consequence by asserting the reality of the minute (*aṇu*), or of that which is beyond division—the " atom "[2]. But in fact you cannot avoid thinking of the atom as having parts : in the first place because it must be thought of as split into fragments or permeated by the ' ether ' which you call all-pervading, but which would not be all-pervading if it were not within as well as without the atoms.—To this point the reply of the *Nyāya Sūtra* appears to be that this *vyatibheda* or permeation is in fact a notion only applicable to things which have constituent parts (*kārya-dravya*), because ' within ' and ' without' imply *further* parts (*karaṇāntara*)[3]. The all-pervadingness of ether is attributed to it on other grounds[4] than on the absurd supposition of its pervading the atom The opponent says, in the second place, that the atom must be thought

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[1]*sutra's* 15—17 are the connecting link between the attack on the whole and the attack on the atom, i e. the ultimate part which as having no parts would not be exposed to the preceding dialectic Parts which are not ultimate could be shown to be unreal by this same dialectic—*avayavāvayavi-prasangas caivam ā pralayād*

[2]*paraṁ truṭeḥ* exactly translates the Greek *atomos*

The *Nyāya* and *Vaiśeṣika* accepted the physical theory of atoms, but they were neither of them metaphysical atomisms,—as Buddhism was. The *Naiyāyika* acceptance of the *avayavin*, the whole as a reality, and the *Vaiśeṣika* doctrine of *samavāya*, the relation by which parts constitute a whole, and of the reality of the universal (*sāmānya*), are diametrically opposed to atomism It is the *sarvaṁ pṛthak*, *sarvaṁ kṣaṇikam*—everything is separate, everything is instantaneous—of Buddhism that is the real ' atomism '

[3]*kārya* in such a context means a whole and *kārana* means the parts which constitute, or are the *samavāyikāraṇa* of, the whole.

[4]Stated in the next two *sūtras* 21-22.

of as having parts because figure or shape[1] implies an arrangement, which again implies parts to be arranged: and further because an atom is thought of as being in contact with other atoms—which means that the atom on one side is in contact with one *part* of it, and the atom on another side is in contact with another *part* of it.—To this very awkward difficulty the *Nyāya Sūtra* finds no specific reply, and contents itself with re-assertion of the impossibility of infinite division.

The opponent then retorts—if there really were external objects, it would be true that infinite divisibility would be impossible. But our whole point is that thought, on which you rely as having these external things for its objects, is in fact illusory[2]. "As a result of analysis

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[1]The assumption being that atoms must have some shape or other, being finite corporeal things. Epicurus, in view of the difficulties arising from allowing that atoms have extension and shape, maintained that the atom is *not* the minimum, but the indivisible. It seems to me that it is precisely these two views of the atom—as the minimum, and as the indivisible—that are stated as alternative possible views in *NS* IV. ii. 16 and 17. *na pralayo 'nusadbhāvāt. paraṁ vā truṭeh.* "The external object does not vanish (as the result of endless division into parts), because a *minimum* remains. Or else something which is *beyond division*". See H. A. J. Munro's *Lucretius*, Vol. II, notes, on *Lucr.* I. 599—634, for Epicurus' statement: εἴρηται δε ἄτομος οὐκ ὅτι ἐστὶν ἐλαχίστη ἀλλ' ὅτι οὐ δύναται τμηθῆναι. "what is asserted in the name 'atom' is, not that it is a *minimum*, but that it cannot be divided."

On Epicurus' view therefore the atom has parts, but parts "abiding from all eternity in unchangeable juxtaposition"—*sunt igitur solida primordia simplicitate quæ minimis stipata cohærent partibus arte, non ex illarum conventu conciliata* (*Lucr.* I. 609).

Epicurus therefore finds some sort of answer to the difficulty here urged. But Indian physics conceives the atom as a *minimum*, calling it always by the name *aṇu* or *paramāṇu* (=minimum), and having no term which gives the precise sense of *atomos*—though of course the *paramāṇu* being a minimum is also indivisible. If the atom is a minimum, and at the same time figured, there is no escape from the difficulty which the opponent here raises.

It would be possible to find an echo of Greek thought in the alternative offered in IV. ii. 16 and 17. Cf. Keith *ILA*, pp. 17-18.

[2]Vātsyāyana supplies the connection of thought thus. *Yad idam bhavān buddhīr āśritya buddhiviṣayāḥ santīti manyate, mithyābuddhaya etāḥ. yadi hi tattvabuddhayaḥ syur, buddhyā vivecane kriyamāṇe yāthātmyaṁ buddhiviṣayāṇām upalabhyeta* (*NBh.* p. 238 l. 6 on *NS* IV. ii. 25). Stcherbatsky argues on the authority of Vācaspati Miśra that this section (*sūtra's* 26—34) is directed against the *vijñānavāda*, but Jacobi has shown that it is still against the *śūnyavādin* that the *Nyāya Sūtra* argues. But, as has been

by thought we fail to apprehend any reality in the supposed existents: we find reality in them no more than we find reality in the cloth when the threads are taken away" (IV-ii-26)[1]. When we analyse the cloth into this that and the other thread there is nothing left to be the object of the conception 'cloth': and everything alike dissolves in this way on analysis.—The reply given is that the reasoning of the opponent is self-contradictory and therefore false (*vyāhatatvād ahetuḥ* IV-ii-27); which Vātsyāyana explains to mean that the 'analysis by thought' spoken of by the opponent implies that there *is* something to analyse after all[2].

Of course the whole cannot be apprehended apart from the parts—the cloth cannot be apprehended apart from the threads—for the simple reason that the whole is grounded in the parts (*tadāśrayatvāt*—28).—The opponent's reasoning is further self-contradictory because in asserting the unreality of everything it denies the existence not only of the objects of knowledge (*prameya*) but also of the instruments of knowledge (*pramāṇa*)[3]. But

said, there is an 'idealistic' moment in the *śūnyavāda* argument It is this aspect of the sceptical dialectic to which we pass in the present passage See also *supra*, p. 80 n 1

[1]See above, footnotes to p 85 If this were a *verbatim* quotation from *Lankāvatāra Sūtra*, as Vidyābhūṣaṇa asserts, the fact would support Stcherbatsky's view · for the *Lankāvatāra* is a *vijñānavādin* work (The earliest Chinese version is stated to have been made in 443 A D It would appear that this version does not include the concluding section in which there is a prophecy of Barbarian kings following the Guptas—obviously referring to the Huns, i e. to a period after 450 A D The remainder of the work must be earlier than 443. There is a reference to *Akṣapāda*—but this too is in the concluding section xx.)

[2]The sceptical position is always suicidal, so that it can always be met by the *argumentum ad hominem*.

[3]The argument here moves to a new phase, with the realisation that the sceptic is destroying not only the objects of knowledge but knowledge itself And it seems to be in this connection—in support of the denial of the reality of the instruments of knowledge, the *pramāṇas*,—that the analogy of dreams was first employed. For dreams are not only without real objects, but also without any logic or criterion of reality Therefore what I have called the idealistic moment in the sceptic's argument was not originally employed to prove the unreality of the external world (the idealist's position)—that had already been done by the dialectic of part and whole—but to round off the

it is by these instruments of knowledge that we establish either that (as we hold) analysis reveals the reality of objects or that (as the opponent argues) it fails to reveal any reality (*sutra* 29). If the sceptic's position that nothing exists can be *proved*, then proof at least exists: if it can *not* be proved, and is a mere assertion without any proof,—then why should we not assert without proof the contrary proposition that 'everything exists"? (*pramāṇānutpatty-utpattibhyām* IV-ii-30. "By both alternatives—impossibility of proofs or possibility of proofs"—the opponent's position is contradicted).

It is not until the argument has reached this stage that the sceptic unmasks his real position, which is that there is in fact no such thing as proof,—the whole conceit of proof and things to be proved is like a dream and a mirage[2]. The *Nyāya Sūtra* (33) says that 'this is not established, because there is no reason to prove it: which Vātsyāyana interprets to mean that the *unreality* of dreams can only be known by contrast with the *reality* of things apprehended in the waking state. If you argue

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argument into complete scepticism (*sarvaśūnyatāvāda*) That is why Nāgārjuna uses it But of course the dream-argument lends itself to the disproof of the reality of external objects, and the idealist adapted it to that use. That is why the dream-argument is found in an idealist work such as the *Laṅkāvatāra Sūtra* The later Indian commentators take it as a specifically *vijñānavāda* argument and Stcherbatsky follows them. But had it been so it would not be found used by Nāgārjuna in the *Mādhyamika Sūtra*.

[1]Perhaps Vātsyāyana refers here to the *sarvāstivādin* school of *Bauddha* philosophy—"there is then nothing to choose between you *śūnyavādins* and your extreme opposites in the *Bauddha* schools, who maintain that everything exists".

[2]*svapnaviṣayābhimānavad ayaṁ pramāṇaprameyābhimānaḥ* (*sūtra* 31). *māyāgandharvanagaramṛgatṛṣṇikāvad vā* (*sūtra* 32).

Vidyābhūṣaṇa (*HIL*, p 46) regards this as an echo of *Mādhy. Sūtra*, VII, 34 —

yathā māyā yathā svapno gandharvanagaram yathā,
tathotpādas tathā sthānam tathā bhaṅga udāhṛtam.

This is the concluding couplet of the section in which Nāgārjuna applies his destructive dialectic to the threefold notion of origination, subsistence and destruction (*utpāda-sthiti-bhaṅga*) It answers the objection—"If these notions are meaningless, what did the Buddha mean by using them in his teaching?" Thus, although not used in just the same context as the dream-analogy is used by the opponent in the *Nyāya Sūtra*, the couplet still has in Nāgārjuna the same general function of rounding off the sceptical dialectic.

that dream-objects are unreal because they are *not* perceived when a man wakes, you must also admit that waking objects are real because they *are* perceived when the man is awake : for reality or existence is the criterion of unreality or non-existence (*bhāvenābhāvaḥ samarthyate*)[1].

The other objection urged in the *Nyāya Sūtra* against the dream-argument is that " the conceit of an object in dreams is like (the objects of) remembrance and desire." Vātsyāyana explains that as the object of remembrance and desire is something previously experienced, so is the object in dreams. We do not argue that the objects of memory and desire have no basis in reality, merely on this ground . neither ought we to do so in the case of dreams For they *have* a basis in reality. And it is only with reference to the real basis or originals of dreams (*āśraya, pradhāna*) that the waking man pronounces his dreams unreal.

Comparing the treatment of the dream-argument in *Śābarabhāṣya* with its treatment in the *Nyāyabhāsya* it is clear that the idealistic aspect of that argument is prominent in Śabara—dreams are illusory *because they are ideas* (*pratyayatvāt*);—and that, for him, it has disengaged itself from the *śūnyavāda* context in which it was undoubtedly first employed. Vātsyāyana, on the other hand (and of course the *Nyāya Sūtra*), nowhere suggests that ideas, as such, are their own objects, so to speak : and the dream-argument remains for him a mere adjunct of the main line of thought—viz., that analysis fails to find reality in the object. In the absence of the technical

[1] Vātsyāyana's use of the lamp-simile here is not clear, nor is the reading certain. We want him to say that the light of truth must be present in one case if we are to argue its absence in the other case He says that you can only argue from non-apprehension to absence if the thing is not absent in both cases—*yathā pradīpasyābhāvād rūpasyādarśanam iti* " as we say 'colour is not apprehended because the lamp is absent' ". The meaning apparently is that we can say this only because the lamp is present in other cases when we see the colour

terms of the *vijñānavāda* in Śabara's account, it would be wrong[1] to suppose that Śabara is polemising against the developed *vijñānavāda*. But this much may be said that he seems to be dealing with a type of *śūnyavāda* which is different from that of Nāgārjuna i.e., from that type with which the *Nyāyasūtra* and *Nyāyabhāṣya* deal: he seems to deal with a *śūnyavāda* which stresses the dream-argument in such a way as to bring out its idealistic implications and to make it fundamental.

C. THIRD DIFFICULTY

SECTION 5. DISTINCTION BETWEEN THOUGHT AND OBJECT

The third part of the defence of perception in Śabara's *Bhāṣya*, a translation of which is now given, attacks a view that ideas themselves are in some sense 'void'—empty, or nothing (*śūnya*). In one sense it has already been shown that ideas are 'empty', seeing that it has been shown that their supposed objects are non-existent. But the argument is now carried a step

[1] Jacobi's strongest point against the view of Stcherbatsky that the early *sūtra's* and *bhāṣya's* polemise against the *vijñānavāda*, is the absence from them of the peculiar phraseology of *vijñāna* and *ālayavijñāna*.

Jacobi finds in this passage of Śabara's *bhāṣya* a commentary on *Ved. Sūtra* II ii 28—32 (the polemic on Buddhism, parallel to the passage from the *Nyāya Sūtra* which has just been dealt with) He draws attention to a reference to Śabara in *Saṁkara's* commentary on *Ved S.* III iii. 53, which seems to indicate that a commentator might well say by anticipation in comment on the *Pūrva-mīmāṁsā* what would have been in place rather in comment on the *Vedānta or Uttara-Mīmāṁsā* the two systems being at first what their names implied,—parts of one whole He believes that the *vṛttikāra* here quoted by Śabara is one Bodhāyana author of a comment on *Vedānta*

The *Ved S.* passage runs :—

28. *nābhāva upalabdeḥ,*
29 *vaidharmyāc ca na svapnādivat,*
30. *na bhāvo 'nupalabdeḥ,*
31 *kṣaṇikatvāc ca,*
32 *sarvathānupapatteś ca.*

"The objects of cognition are not non-entities, because we actually perceive external objects Nor is our cognition similar to dreams, because there is a difference between waking-cognition and dream-cognition The idea cannot be the object because it is not the idea which forms the object of our apprehension Also because ideas are momentary. And (the opponent's position is absurd) because it is altogether impossible" (This follows Jacobi's interpretation)

further, with the assertion that the 'idea' cannot be distinguished from the 'object' of the idea[1].

Why not say that it is the 'idea' that we perceive, in place of importing a superfluous 'object'?—Śabara replies[2] that we can and must distinguish the 'object' from the idea. Besides, ideas cannot be (as the *Bauddha* here suggests, and as the *Naiyāyika* maintains) *perceived*[3].

And, thought being for the *Bauddha* a series of instantaneous ideas, the supposed *self-conscious* (*saṁvedya*) nature of thought is as inconceivable as the *Naiyāyika* 'inner sense' account of the perceptibility of ideas. Knowledge is presupposed by objects, but is not the *object* of our perception: the object of perception being the 'object' (as opposed to the idea); and the existence of ideas being *inferred* thence The idea is designated by the name of the object[4] of which it is the idea; and cannot be otherwise designated (*avyapadeśya*): and this indesignableness proves that the idea as such is not *perceived*. (But it does not prove that the idea does not exist.) Śabara[5] says :—

This passage then, like that in Śabara, seems to argue against a type of scepticism in which an idealistic moment had become a relatively important and independent part of the argument. The last *sūtra* should perhaps be rendered . " and the assertion of non-existence *in toto* (i e both of object and of idea) is absurd because impossible "

It is however possible that the *Nyāya* and *Vedānta* are attacking the same view, but make it look different by difference of selection and emphasis.

[1]It is this assertion which, according to Vātsyāyana, is intended to be met by the word *avyapadeśya* in *NS* I i. 4 See below

[2]Like Hylas (in Berkeley's Dialogues) and G. E Moore in his '*Refutation of Idealism*'

[3]This is a point of difference between the *Nyāya* and the *Mīmāṁsā* The *Nyāya* teaches that cognition is a 'quality' of the soul, perceived like any other quality by contact with the sense-organ,—the sense-organ in this particular case being the *manas* or internal sense. The *Mīmāṁsaka* denies this 'inner sense' theory, and says that the existence of apprehension is *inferred*.

[4]As Vātsyāyana explains the object is called '*ghaṭa*', and the *knowledge* of it (*ghaṭajñāna*) can only be referred to *by the same name* with an added '*iti*', i.e. the same name 'in inverted commas' To designate the idea of a pot, we say " the idea 'pot' ".

[5]*Śābara-bhāṣya* p. 9 l. 11 to p. 10 l 10.

"But the idea is *void*—nothing. How so? Because we do not find any difference of presentational form (*ākāra*) between the thing and the cognition of it. It is our idea that is the object of perception (*pratyakṣā ca no buddhiḥ*), and so the supposed something in the shape of a 'thing' separate from the thought is nothing at all. —This would be so if the thought had the form of the thing: but our thought has no form (*nirākāra*); while the external thing has form (*ākāravat*), since it is perceived as connected with external space. For perceptual cognition has the thing for its object (*arthaviṣayā hi pratyakṣabuddhiḥ*), and has not another thought for its object (*na buddhyantaraviṣayā*)[1]. For thought is momentary, instantaneous (*kṣaṇika*)[2], and will not endure through the time of another thought.—The view that thought is known just in its coming to birth, and that it makes known something else, like a lamp, is wrong. For no one apprehends a thought where a thing is not apprehended. But when a *thing* is apprehended a man knows that there is *thought*, as the result of an inference. Simultaneousness (of apprehension of the thing, and apprehension of the thought) is impossible in this matter. It may be objected that it is after the thought has arisen that we say 'the thing is known', and not when the thought has not (yet) arisen. Therefore the thought arises first, and afterwards the thing is known. To this we reply that it is true the thought *arises* first: but it is not *known* first. For it sometimes happens that even when a thing has been apprehended we say that we have not apprehended it (*jñāto py arthaḥ san 'ajñāta' ity ucyate*). Nor can we apprehend the precise character (*rūpa*) of the thought without designating the *thing* (which is the object of the thought (*na ca arthavyapadeśam antareṇa buddheḥ rūpopalambhanam*). Therefore thought cannot

[1] cp. *Ved. S.* II. ii. 30 *na bhāvo 'nupalabdheḥ.*
[2] cp. *Ved. S* II. i. 31 *kṣaṇikatvāc ca.*

be designated (*na vyapadeśyā buddhiḥ*)[1]; and what cannot be designated is not the object of perception[2]. Therefore thought is not the object of perception.

—Moreover, granted that in case the cognition and the object cognised were identical in form there would be no such thing as *cognition*, this would not establish the non-existence of the *thing*, which is the object of perception [*arthasya pratyakṣasya sataḥ na* (*sc.* *abhāvaḥ*)]. And (as a matter of fact) the thought and the thing are *not* identical in form; for the thought, the existence of which we infer, is *without* shape or form (*anākāram eva*) · while the thing, which we apprehend as the *object of perception* (*pratyakṣam evārayacchāmaḥ*) has shape or form (*sākāra*). Therefore thought has the thing as its support, i.e. depends on things (*arthālambanaḥ pratyayaḥ*. Cf. just below—*na nirālambanaḥ pratyayaḥ*). Moreover the thought of a cloth has a cause restricted

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[1]With this cf *avyapadeśyam* in *NS* I i 4, and particularly Vātsyāyana's exposition, p 12 l 3 to p 14 l 6 The passages in *Śabara* and *Vātsyāyana* explain each other.

[2]Reading the emendation suggested by the *B I edn* editor, Maheśa Candra Nyāyaratna, in a footnote to p 10, viz, *avyapadeśyam ca na pratyakṣam*, in place of the *avyapadeśyaṁ ca nāpratyakṣam* of the text This emendation is necessary, as the next sentence shows

The emendation suggested by Jacobi in *JAOS* xxxi p 20 n. *tasmān nāvyapadeśyā buddhih*, *avyapadeśyam ca nāma pratyakṣam* is questionable from the point of view of textual criticism and gives a meaning inconsistent both with the present passage and with the parallel passage in Vātsyāyana's *Bhāṣya*, p 12 l 3 ff

No doubt Jacobi desired to bring Śabara into line with *NS* I i 4 But although the statement *avyapādeśyam na pratyakṣam* seems at first sight to conflict with the *NS avyapadeśyam pratyakṣam*, Śabara's passage is in fact another way of saying the same thing,—at any rate the same thing as Vātsyāyana says For Vātsyāyana's point is that the perception and the thing perceived are different, but that we use the name of the thing perceived to 'designate' the perceptual process itself · the latter being in itself 'indesignable'—*avyapadeśya* This is just what Śabara asserts in the clause *na vyapadeśyā buddhih* But of course Śabara draws from this a conclusion which Vātsyāyana would not accept when he says *apratyakṣā buddhiḥ*. For the *Naiyāyika* held that mental processes such as perception are themselves perceptible by the internal organ In this he differs from the *Mīmāṁsaka*. But both are at one, as against the *Bauddha*, in asserting that the *process* of perception is a different thing from the *object* perceived and that the latter can be designated, whereas the former cannot be designated in its own form

to the case (i.e. only arises) when threads are present (*niyatanimittaḥ tantuṣvevopādīyamāneṣu paṭapratyayaḥ*): if it were not so, the idea of a *jar* would sometimes occur, in the case of a man with senses unimpaired, even when threads are present. But this does not happen. Therefore thought is not independent of things, i.e. it refers to external things (*na nirālambanaḥ pratyayaḥ*). And therefore perception is not an erroneous process (*na vyabhicarati pratyakṣam*)."

The passage in which Vātsyāyana explains the word *avyapadeśyam*[1] in *NS* I. i 4 is closely parallel to the third part of Śabara's argument.

What Vātsyāyana has in mind is that there is no way of naming cognitive states except through the names of their objects. How can we distinguish the perception of colour from the perception of taste, except by saying that the former is the apprehension *of colour*—'*rūpam iti jānīte*',—and that the latter is the apprehension *of taste*—'*rasa iti jānīte*'?

The words '*rūpa*', '*rasa*', denominate the *object* of the perceptions (*viṣayanāmadheya*), and not the perceptions as such. And yet thereby (*tena—viṣayanāmadheyena*) the perceptions are in fact expressed (*vyapadiśyate*).

From this, which Vātsyāyana would accept as so far a correct statement, some appear to have drawn a further

[1]Vācaspati Miśra does violence to the *Sūtra* and *Bhāṣya* in his anxiety to father on the early authorities of the *Naiyāyika* school 'Trilocana's' doctrine of two kinds of perception—perception without qualifications (*nirvikalpaka*) and perception with qualifications (*savikalpaka*). He interprets the *sūtra* as mentioning both kinds—*nirvikalpaka* in the word *avyapadeśya*, and *savikalpaka* in the word *vyavasāyātmaka*. The doctrine however is later, and seems to have arisen in answer to the Buddhist view of perception as *kalpanāpoḍha*, i e the bare impression of sense divested of all additions made by the understanding. That this *Bauddha* interpretation of *avyapadeśya* as *kalpanāpoḍha* is a not unnatural interpretation is evidenced by Dr Jhā's footnote to p. 115 of vol. I of his translation, where he says " it would seem that the *Bauddha* definition of perception as *kalpanāpoḍham abhrāntam* were a true rendering of Vātsyāyana's view " But it seems to me that Vātsyāyana's view (which I believe represents the probable meaning of the *sūtra*) is different both from the *Bauddha* view and from Vācaspati's.

conclusion which Vātsyāyana rejects, and which, as he thinks, the *sūtrakāra* intended to reject by the insertion of the word *avyapadeśyam* in his definition of perception. This conclusion is stated in the words: *nāmadheyaśabdena vyapadiśyamānaṁ sat śābdaṁ prasajyate*—" the *perception*, being expressed by a word which is the name of the *object*, turns out to be an affair of words—verbal ".

The difficulty is to see just how this conclusion is justified by these premises: a difficulty due to the fact that we do not know the precise nature of the doctrine which Vātsyāyana here criticises[1].

In what sense can it be held that the perception is '*verbal*' on the ground that you can only express it (*vyapadiś*—)[2] by using the *word* which is the name of the object perceived?

—The position seems intelligible. As expounded by Vātsyāyana, it starts out from the assertion that wherever there is a distinct thing, there is a distinct word for it—*yāvad artham vai nāmadheyaśabdāḥ*—: and the implication of this is that if there is a supposedly distinct thing which has *no* distinct name, then it is *not* after all a distinct thing. Now cognition, as such, comes under this description, for it has no name other than the name of the object of which it is the cognition. Therefore it is nothing distinct from the object,—or, if it can be at all distinguished, then thoughts are just the *names* themselves as distinguished from the things. There are *things*: and there are *names* of things: but there is nothing else,—no third distinct entity 'cognition'[3].

Vātsyāyana replies that the distinct status of the apprehension as such is shown by the fact that there is apprehension of the object *before* the union of word and

[1] Vācaspati appears to connect it with the philosophical grammarians, and quotes in this connection two passages from Bhartṛhari's *Vākyapadīya*, I. 124 and I. 126 (NVT p. 83, and the editor's list of identified quotations, to which I owe these references)

[2] Cf *avyapadeśya* in *NS* I. i. 4 See next note

[3] This suggests J. B Watson's 'behaviorist' psychology

thing has come into play (*anupayukte śabdārthasambandhe*): and even after the naming has taken place the same remains true—the cognition remains distinct from the names. This is what the *sūtrakāra* asserts by the word *avyapadeśya*,—i.e. distinct from names[1]. When it is necessary to speak of the cognitions as such—as it is for practical convenience (*vyavahāra*)—we can of course indicate what particular cognition we refer to: the 'indication' (*vyapadeśa*) being made by the name of the object followed (in Sanskrit) by the particle *iti*. The idea is not the object: but it can be indicated as being *of* the object.

SECTION 6 PERCEPTION AND DOUBT

Vātsyāyana interprets the word *vyavasāyātmaka* in the definition of perception as excluding the case of doubtful apprehensions "Since a man, seeing an object from a distance, is not sure whether it is smoke or dust, and the uncertain cognition of the object which he has in the form 'this is either smoke or dust', is 'produced by the contact of organ and object (*indriyārthasaṁnikarṣotpanna*), it should be included under the head of perception. —It is with reference to this possible wrong view that the word *vyavasāyātmaka*, 'amounting to conviction', is inserted in the definition ". Nor can it be said that it is the 'mind'[2] (*manas*) alone that is concerned in such doubtful apprehensions, and that they do not therefore arise from the sense-contact. " For it is on having

[1]Jacobi *JAOS* xxxi, p. 20, footnote, renders the terms by 'not intimately connected with words', which is as close a rendering as is feasible. But I think he is mistaken in saying that its meaning is more accurately expressed in Diṅnāga's definition of *pratyakṣa* by *kalpanāpoḍha* · for this implies the equation *avyapadeśya*=*nirvikalpaka*, which seems to me later. Cp. PBh p. 187 II. 18-19. Praśastapāda paraphrases *NS* I. i. 4 in this passage, and repeats the word *avyapadeśya* in his paraphrase See p 118, n. 2.

[2]' mind ' is a symbol for ' *manas* ' not a translation.

actual visual impression of the object that the man has the uncertain apprehension (*na avadhārayati*) of it. Just as in true perception it is something grasped by sense that is grasped by 'mind', so (in the case of uncertain apprehension) it is because he has *failed* to have certain apprehension with the senses that he *fails* to have certain apprehension with the 'mind'. And this failure to have certain cognition with the 'mind', which is conditioned by the failure of the senses to give certain apprehension, being a state of mere hesitation (*vimarśamātram*) with reference to the precise character of the object (*viśeṣāpekṣam*) — constitutes doubt (*saṁśaya*); which does not arise previously to contact of sense with the object. In every case of true perception there is a determination or conviction (*vyavasāya*) of the knower which comes through the sense-organ, as is shown by the fact that, where the sense-organ is injured, no reflective consciousness of such determinate cognition (*anuvyavasāya*)[1] arises ".

[1] *vyavasāya* and *anuvyavasāya* seem to be used here in the technical sense common in the later school, the former being the cognition itself—*ghaṭo 'yam*, this is a pot—, the latter being the awareness of the cognition—*ghaṭam aham jānāmi*, I apprehend the pot

A blind man could not have *awareness of* perception of colour—*rūpam ahaṁ jānāmi*—because he lacks the organ for the *perception* of colour. Similarly he could not even have a *doubtful* apprehension of the colour of a thing, nor could he be aware of any such doubtful apprehension. (There is no reason perhaps why *anuvyavasāya* should not be applied to awareness of a *doubtful* apprehension But as Vātsyāyana confines *vyavasāya* to cognitions from which doubt is excluded, it seems that he would naturally confine *anuvyavasāya* to the awareness of such [i e. certain] cognitions only.)

The exclusion of doubt from perception is in line with the exclusion of error from perception. The motive is to make perception a '*pramāṇa*' = *pramākaraṇa* The thought is that knowledge, if it *is* knowledge, excludes error and doubt: and this applies to perceptional as to inferential knowledge. A fallacious reason is *not* a reason, but only an appearance of reason (*hetvābhāsa*). So an erroneous apprehension by sense is *not* a perception, but only an apparent perception: and some logicians accordingly use the term *pratyakṣābhāsa* to designate erroneous apprehensions of sense.

SECTION 7. THE 'CONTACT' IN PERCEPTION

Perception is defined in the *Nyāya Sūtra* as arising from contact between object and sense-organ. Vātsyāyana points out two difficulties involved in this part of the definition. One is that the 'perception' of the 'qualities' of the soul (i.e. of cognition, pleasure and pain, and so on), might appear to be excluded from perception, since there would seem to be no sense-organ at work here. He replies that 'mind' (*manas*), the contact of which with soul is the condition of all perception including perception of one's own states, is a sense-organ. But, the opponent objects, it is not included in the enumeration of the sense-organs (*indriya*) given in *Nyāya Sūtra* I. i. 12, viz., smell, taste, sight, touch, and hearing —The answer is that that enumeration is an enumeration of those organs only which (i) are composed of the material elements—*bhautikāni indriyāṇi*, (ii) are each confined to a special class of objects—*niyataviṣayāṇi*, (iii) are organs of perception only so far as they are themselves endowed with the qualities which they apprehend[1]. Mind[2], on the other hand, is not composed of any substance-stuff, has all things for its objects, and does not operate as an organ through being endowed with the

[1]The principle of like grasping like underlies this primitive psychology or physiology of the sense-organs. The hearing-organ grasps sound because it is made of 'ether', and sound is the peculiar property of ether. the organ of smell is made of earth-substance, of which odour is the peculiar property · the taste-organ is made of water, of which sapidity is the *proprium* : the visual-organ, of light-substance, *tejas* the tactile-organ, of air, to which the quality of touch is proper Earth, water, fire, air, ether are the five material substances (*pañca-bhūtāni*). See *NS* I. i. 12—14. To these five *bhūta's* or 'stuffs' four other 'substances' are added—space, time, the soul, and the mind or inner organ—to make up the Nine Substances which the *Vaiśeṣikas* recognised, as mentioned in *VS* I. i. 8.

[2]In short, it marks the point at which the 'like grasps like' theory of perception goes bankrupt. Mind which grasps conscious states is itself not endowed with consciousness. See PBh. p. 89 l. 18.

qualities which it apprehends. And though not enumerated among the sense-organs in I. i. 12, it is separately mentioned in I. i. 16, where it is argued that it *must* exist since otherwise simultaneous cognitions would be possible[1], as in fact they are *not* possible. And that it is a sense-organ is to be learned from another philosophical system[2],—according to the accepted methodological principle[3], that 'a view of others which is not rejected is accepted[4].

The other difficulty raised by Vātsyāyana is that the definition only mentions the conjunction of organ with object, and fails to mention the conjunction of soul with internal organ and of internal organ with external sense-organ which are essential factors in the 'contact' from which perception arises.—The answer given is that this

[1] *VS* III ii. 1 argues that *manas* exists on the rather different ground that when there is contact of object, organ, and soul, knowledge sometimes arises but sometimes does not,—which implies a fourth factor. In both arguments *manas* stands for 'attention'.

The argument from non-simultaneity of cognitions and volitions is used in *VS* III. ii 3 to prove that there is only one 'mind' in each body and similarly in *NS* III ii 59 *VS* VII i 23 teaches that *manas* is atomic,—not all-pervading like the soul. similarly *NS* III. ii. 62

[2] The *Vaiśeṣika Sūtra*. See preceding note for the similarity of the two systems in their doctrine of *manas*. But I find no explicit statement in *VS*, any more than in *NS*, that *manas* is a sense-organ. The motive for calling *manas* a sense-organ no doubt is that both systems class psychical processes and states among the 'qualities'· and a sense-organ is required for the perception of these 'qualities' Vātsyāyana and Praśastapāda both call *manas* a sense-organ. But see below pages 364-5

[3] *tantrayukti* See Vidyābhūṣaṇa *HIL* p 24

[4] *paramatam apratiṣiddham anumatam* 'anumata' is the name given to one of the *tantrayukti's* both in Kauṭilya's and in Suśruta's lists · and it is defined by them in exactly the words here used by Vātsyāyana

Diṅnāga in his *Pramānasamuccaya* ridiculed Vātsyāyana's use of the principle in this passage, justly remarking that if acceptance of doctrines follows from not rejecting them the other sense-organs need not have been mentioned in the *Nyāya Sūtra* (seeing that the *Vaiśeṣika Sūtra* mentions them) —*aniṣedhād upāttam ced, anyendriyarutam vṛthā* (quoted in *NVT*, p. 97 l. 1. 23. In the line cited on the same page l. 1—a line which forms the first half of the same couplet, as appears from *HIL* p 280 footnote—Diṅnāga seems to point out that the admission of *manas* to the status of organ of perception is in fact implied in classing psychical states such as pleasure and pain among the *objects* of cognition ·—*na sukhādi prameyaṁ vā, mano vāstīndriyāntaram*. His point against the *sūtra* apparently is that it ought to have classed *manas* as an organ but failed to do so. "Either psychical states are not objects, or else mind is an additional organ").

sūtra is not a formal statement of the *full* conditions of perception (*etāvat pratyakṣe kāraṇam iti*), but only of the special conditions (*viśiṣṭakāraṇavacanam*): the conjunction of soul with internal organ is a condition common to perception and other forms of knowledge such as inference: as for the conjunction of the internal organ with the external organs, which *is* peculiar to perception,—*bhidyamānasya pratyakṣajñānasya nāyaṁ bhidyata iti samānatvān nokta iti*—that is, "it is not mentioned because it is not different in the different varieties of perceptual cognition, but is alike in them all": which presumably means that it may be taken as *implied* in the mention of contact of sense and object. The explanation is however so clearly inadequate that efforts have been made by the commentators to get some other meaning out of the sentence[1]. The truth seems to be that the *sūtra* had not yet systematised its doctrine of *saṁnikarṣa* to the extent of explicitly recognising (what is implied in its position) that *manas* must form one of four factors in the 'contact'[2]. Nor was the position one which it was easy to make explicit without raising serious difficulties. For *manas* then tends to combine two quite different functions. (i) as the organ of attention which prevents the knower from having more than one cognition at one time; (ii) as the organ through which the knower apprehends one particular class of objects, viz., his own psychical states.

[1]See *Vārtika ad loc* Gaṅgānātha Jhā follows one of these alternative explanations in his translation.

[2]It is noteworthy that *VS* III 1 18 omits *manas* in its enumeration of the factors of the 'contact' from which external perception arises, just as *NS* I. 1 4 does It is incredible that the omission should be, so to say, accidental in both cases. I think therefore that the explicit notion of a *catuṣṭaya* of factors comes after the *sūtra*-period, though already present in Vātsyāyana and Praśastapāda. Vidyābhūṣaṇa says that Diṅnāga in quoting *VS* III. 1. 18 inserts *manas* into the formula (*HIL* p. 279 n.). Did he insert it as representing the doctrine of the *Vaiśeṣika* school of his day?

(The occurrence of *manas* in *VS*, V ii 18 proves nothing, since that *sūtra* is defining the apprehension of pleasure and pain, in which *manas* is concerned in its special 'inner-sense' function).

And yet it is difficult to differentiate the two functions: and if we insert *manas* as a fourth factor into the formula of *VS* III. i. 18 *atmendriyārthasaṁnikarṣād yan niṣpadyate* (which appears to be the formula for the contact which conditions external perception, i.e. identical with I.i. 4), it will become the same as the formula of *VS*. V.ii.15 *atmendriyamanorthasaṁnikarṣāt sukhaduḥkhe* (which is the formula for the contact which conditions 'inner-sense' awareness of psychical states).— There was therefore a motive for omitting or slurring over the factor of *manas* in 'external perception'. But when, in opposition to the view that ideas are self-conscious (*saṁvedya*)[1], the *Nyāya-Vaiśeṣika* school elaborated its doctrine of the perceptibility by the internal organ (*mānasapratyakṣatā*) of cognitions and when at the same time the internal organ (i.e. attention) was insisted on as a factor in *external* perception, an incompatibility between the two functions attributed to *manas* (as a factor of attention in external perception, and as the " organ " of internal perception) becomes obvious. The Naiyāyika held that the cognition 'this is a jar' (*vyavasāya*) is different from, and can exist in independence of, the reflective consciousness 'I have knowledge of this jar' (*anuvyavasāya*). The latter was called in the later school *mānasapratyakṣa*, perception by the internal organ the

[1]For the *Nyāya-Vaiśeṣika* polemic against this view see *NK* pp 90—92 (translated by Faddegon pp. 403—406) See also *NK* pp 96-97 (Faddegon, pp 406—409) for criticism of the *Mīmāṁsaka* view that thought is inferred from the 'known-ness' (*jñātatā*) of things.

For the difference between the *Bauddha* view of cognition as *saṁvedya* and the *Mīmāṁsaka* view of it as *svaprakāśa*, see Jhā *PSPM* pp 26—28 The *Bauddha* meant by *saṁvedya* that the cognition can be its own *object* (*karma*) Prabhākara replies that we are aware of our cognitions as subjective processes but not as objects—*saṁvittayaiva hi saṁvit saṁvedyā, na saṁvedyatayā* (quoted *PSPM* p 26). Therefore, if we are to call cognitions *saṁvedya* we must be careful not to understand *saṁvedya* in the sense of *prameya*, i e., *object* of cognition. For cognition is never the *object* of direct apprehension It is however the object (*prameya*) of *inference* · we can infer that cognition *exists*—but that does not mean that it is ever an object of *direct apprehension.*

former is *bahyendriyapratyakṣa*, perception by external organs.*

SECTION 8. TWO MOMENTS IN PERCEPTION AND VARIOUS MODES OF 'CONTACT'. PRAŚASTAPĀDA'S DOCTRINE

Up to this point in the exposition it has not been necessary to go beyond the doctrine of the *Nyāya Sūtra* as expounded by Vātsyāyana. The commentaries of Uddyotakara and Vācaspati Miśra have been ignored, for the reason that they presuppose a development in the doctrine of perception of which there seems to be no trace in the *Nyāyabhāṣya*. This development in doctrine consists in a twofold progress in analysis: first, of the *object* (*artha*), which was seen to present a complexity hardly suspected at first; and secondly of the contact (*saṁnikarṣa*), which will have to take on colours corresponding to various aspects of the object, if it is to be maintained that the object is equally an object *of perception* in all aspects. It may well be that the categories of the *Vaiśeṣika* system supplied the necessary instrument of analysis[1]: and it is in a *Vaiśeṣika* work, the

* Although Vātsyayāna finds himself compelled in this passage to admit that *manas* is the *indriya* in self-consciousness he never developed explicitly the doctrine of *mānasa-pratyakṣa*, and regularly uses the phraseology of *saṁvedya* and *saṁvit*. But his admission here, emphasised by Diṅnāga, became the source of the doctrine of 'inner sense'.

[1]Diṅnāga, as often, hits the mark in his criticism, He says that the *Naiyāyika* borrows his definition of perception from the *Vaiśeṣika*, but fails to connect perception with 'generality, particularity, substance, quality, and action, on which the *Vaiśeṣika's* intercourse (i.e, *saṁnikarṣa*, 'contact') is dependent' (Vidyābhūṣaṇa, *HIL* p 279). The order in which the five are stated is strongly suggestive of the mention of these five as '*viśeṣaṇas*' or qualifications of the percept by Praśastapāda. The view commonly accepted is that Praśastapāda owes what is distinctive in his logical doctrine to Diṅnāga. But there is evidence that the contrary is the case, and that Diṅnāga found already developed in the *Vaiśeṣika* school (whether by Praśastapāda or by some predecessor of Praśastapāda) some at least of the doctrines which Praśastapāda is supposed to have borrowed from him If for instance his reference here is to the five '*viśeṣaṇa's*' of Praśastapāda, it follows that Buddhist logic owes its five '*kalpanā's*' (which are equivalent to the *viśeṣaṇa's*) to the Vaiśeṣika school. A further piece of evidence pointing in

Bhāṣya of Praśastapāda, that the earliest statement is to be found of the two doctrines which subsequently became fundamental in the *Naiyāyika* theory of perception. The section on perception in Praśastapāda's *Bhāṣya* forms in fact the basic text for this phase of the doctrine of perception[1].

the same direction is to be found in *HIL*, *ibid*, where Diṅnāga is stated to quote an *explanation* of the *Vaiśeṣika Sūtra* on perception,—the explanation corresponding closely with Praśastapāda's words Again, Diṅnāga's attack on the doctrine of the universal (*sāmānya*) cited in the *SDS* (Chapter on *Bauddhas* = p 21 of Cowell and Gough's trans) is directed against teaching identical with that found in Praśastapāda (these lines are assigned to Diṅnāga by Vidyābhūṣaṇa, on the authority of the *Jaina* logician Dharmabhūṣana, but Vidyābhūṣaṇa does not identify them *HIL* pp. 273—4, note 7 The *SDS* quotes three couplets, and cites Praśastapāda in the context).

[1]The doctrine of *savikalpaka* and *nirvikalpaka* (really traceable to Praśastapāda) is attributed by Vācaspati Miśra to Trilocana (*NVT* p 87, last two lines *asmābhiḥ Trilocanagurūnnītamārgānugamanonmukhaih*). Trilocana is twice referred to in the *Tārkikarakṣā* (pp. 337, 356, according to the TR editor's list of authors cited) Gopināth Kavirāj in his introduction to Jhā's translation of the *Nyāya* (p 15) says "Udayana informs us that in the work of restoration of Uddyotakara's text Vācaspati was indebted to (his teacher or *vidyāguru* as Vardhamāna says) Trilocana" See NVTP (Bibl. Ind.) p. 9—What Udayana says here is that Vācaspati claims to have infused fresh life into the antiquated doctrines of Uddyotakara by means of the elixir of instruction got from the teacher Trilocana (*Trilocanaguroḥ sakāśād upadeśarasāyanam āsāditam amūṣam punar navībhāvāya dīyate — Amūṣām* refers to the *atijaratīnām Uddyotakaragavīnām* of Vācaspati's introductory stanza to *NVT*, on which Udayana is here commenting) It is quite clear that, whoever this Trilocana may have been, both Udayana and Vācaspati regard him as having effected something of a revolution in the teaching of the school. It seems to me that he really stands for the introduction of Praśastapāda's teaching into the *Nyāya*.

Vidyābhūṣaṇa *HIL* p. 134 notes that Trilocana is criticised by Ratnakīrti (*Six Buddhist Nyāya Tracts* pp. 13 and 58), and that a poem *Pārtha vijaya* is attributed to one Trilocana by Rājaśekhara in *Sūktimuktāvali* *HIL* p 369 footnote states that the commentary on the *Nyāyasāra* attributes to Trilocana an eightfold division of Fallacies of the Example. (Praśastapāda gives a twelvefold division PBh. p 247—v infra p 221). It might be conjectured from the order of the authors criticised in the *Apohasiddhi* that Trilocana's date falls between that of Kumārila and that of the *Nyāyabhūṣana*. See Haraprasād Śāstri's introduction to *Six Buddhist Nyāya Tracts*, pp i—iii In the other tract by Ratnakīrti—the *Kṣaṇabhaṅgasiddhi*—the order of authors criticised is Śaṅkara, Trilocana, *Nyāyabhūṣaṇa*, Vācaspati : (see pp. 58 and 70 for Trilocana) Trilocana's date may be about 800. The doctrine of *nirvikalpaka* and *savikalpaka* is already found fully developed, and the terms already used (see *Śl Vārt.*, *pratyakṣasūtra*, lines 86 and 89), in the *Ślokavārtika* of Kumārila, whose date is perhaps 700—750. So that Trilocana cannot be the originator either of the doctrine or of the phraseology

Translation of Praśastapāda's account[1] *of perception.*

"Perception is called *pratyakṣa* because it arises in relation to this or that sense (*akṣam akṣam prati*). These '*akṣas*' or sense-organs are six, namely: smell, taste, sight, touch, hearing, and the internal organ (*manas*).

(i) *Perception of Substances*

"Now perception arises in respect of substance and the other categories. Substance being of two kinds, there is perception of substances which have non-atomic magnitude, provided that they possess parts, and show manifest colour[2], such perception arising from a contact involving four factors[3],—provided that there

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That both Kumārila and Vācaspati Miśra were aware that the doctrine of *nirvikalpakajñāna* derives from Praśastapāda (or from a doctrine similar to his) is perhaps indicated by the fact that they both use Praśastapāda's term *ālocana* in connection with *nirvikalpakajñāna*. See *Śl. Vārt.*, *pratyakṣasūtra*, l. 71 (*viśeṣaṇe tu bodhavye yadālocanamātrakam*), and *NVT* p. 83 l. 18 (*ālocanajñānāvarodhārthenāvyapadeśyapadena*- the word *avyapadeśya* [in *NS* I 1. 4] has the force of including intuitive apprehension).

[1]*PBh.* pp. 186—188. The passage presents serious difficulties. Faddegon gives an analysis of the passage (at p 294), but does not translate it he translates the polemical parts of Śrīdhara's comment at p. 442. See also Gaṅgānātha Jhā's translation in the *Paṇḍit*

[2]The textual reading is: *mahaty anekadravyavattvodbhūtarūpaprakāśacatuṣṭayasaṁnikarṣād.* This gives no sense, and must be corrupt. But there is no doubt as to the meaning (i) Atomic substances (*manas*, and the atoms of earth, air, fire, and water) are imperceptible. Earth-composites, fire-composites, and water-composites are perceptible. (ii) Substances which, although of more than atomic size, are not composites are imperceptible (space, time, ether, and the soul). (iii) A substance which satisfies these two conditions is air But this also is imperceptible in virtue of the curious third condition, for it has not 'manifest colour': and the *Vaiśeṣikas* hold that a substance does not become perceptible in virtue merely of the perceptibility of the quality which forms its peculiar property (in the case of air, touch)—unless at the same time it possesses *udbhūtarūpa* 'manifest form or colour'.

[3]The four factors are object, external organ, mind, and soul ('mind' is a misleading rendering of *manas*, in spite of etymological identity. But the alternative rendering 'internal organ' suggests the function of *manas* as organ of inner sense. In the present context *manas* has its other meaning = the organ of attention).

is also present the totality of conditions constituted by 'merit' and so forth[1].

Two moments in Perception—(i) intuition of svarūpa, (ii) perception of subjects as possessing qualifications.

"Perception is (at first) bare intuition of unrelated things[2]. (But) from a contact of mind and soul which

It is difficult to determine the application of the fourfold contact spoken of in this sentence It seems to be stated as a general condition applying to *all* cases of perception,—and yet Praśastapāda goes on to say that in some classes of perception only two or three factors are involved in the contact. The probable explanation is that the set of four factors, object, organ, soul, and 'mind' represents the norm to which the contact ordinarily conforms: there must be a knower, a thing, an organ of sense, and attentive consciousness But in certain cases there is a departure from this norm, for (i) in internal perception of the soul's own states there can be no contact between knower and thing, because the thing is the knower himself and the 'organ of sense' is simply attentive consciousness to one's own states, so that there is no question of contact between *manas* and *indriya* here and (ii) in the perception of sound there can be no contact between organ and thing in which the sound perceived resides, because the sound resides in the organ itself.

[1] Śrīdhara explains by *dharmādharmadikkālādi*—' merit, demerit, space, time, etc.'. Merit and demerit, as *adṛṣṭa*, constitute a man's 'fate', and are the universal condition of experience as such

[2] This is the crucial passage I adopt the variant *svarūpālocanamātram pratyakṣam* in place of the single word *svarūpalocanamātram* (without *pratyakṣam*) of the text. The text puts a fullstop after *svarūpālocanamātram*, and no stop before it, connecting it with the preceding sentence

Where does this doctrine of bare intuition come from? What are its objects? What precisely is the meaning of *svarūpa*?—Praśastapāda himself gives us a clue later on in the section (p 187 ll 13—17) where he says *sāmānyaviśeṣeṣu svarūpālocanamātram pratyakṣam pramāṇam, prameyā dravyādayaḥ padārthāḥ* This gives an answer to the question—what are the objects of the 'intuition'? (In the light of this passage, I am inclined to suggest that the words *sāmānyaviśeṣeṣu* have fallen out in the present sentence after the word *svarūpālocanamātram*, the omission being due to the similar phrase immediately following, viz, *sāmānyaviśeṣadravya*—etc This would explain the variant reading which adds *pratyakṣam* · for the sentence is reduced, by the omission, to the single word—*svarūpālocanamātram*, so that it became necessary either to attach this to the preceding sentence or else to fill up the structure with some addition. *NK* p. 189 l 19 ff supports this emendation)

As to the meaning of *svarūpa* · the term implies nothing about the *character* of the objects intuited, but merely means that the object, whatever it be, is intuited '*in itself*', i e not as related in any way to anything else. *Svarupālocana* corresponds to the 'simple apprehension' of our schools

bears on the five qualifications (*viśeṣaṇa*), namely, genus, species, substance, quality, and movement, there arises perception in the forms[1]—

The Five Predicables

(1) this substance *exists*

(2) this substance is *earth-substance*

(3) the cow *has horns*

(4) the cow is *white*

(5) the cow *goes*.

logic as opposed to the *viśeṣaṇāpekṣā*, relation to qualifications, which constitutes the 'judgment'.

As to the source of this doctrine of the *svarūpālocanamātra*, bare intuition of essences, it is possible that the view of perception as contact with a bare 'that' (*svalakṣaṇa*) was already current. the consequence being that all qualifications (*viśeṣaṇa*) of the 'that' are no longer *given* in perception, but mere figments of imagination (*kalpanā*).

Praśastapāda may be replying to such a view in his doctrine that perception implies, as one moment in it, an intuition of the as yet unrelated characters (*svarūpa*), which can thus be factors in the perceptual judgment without incurring the condemnation of being imaginative fictions. The *viśeṣaṇa's* are not mere *kalpanā's* because their *svarūpa has* been given in the '*ālocana*' moment of perception.

The view in opposition to which Praśastapāda would then be putting forward this doctrine is that formulated in Diṅnāga's definition of perception as *kalpanāpoḍha* Praśastapāda interprets the word *avyapadeśyam* of the *Nyāya Sūtra*—not in the sense in which Vātsyāyana interprets it—but as meaning that perception gives, prior to naming (*vyapadeśa*) and other relating activities, the characters which are then named and referred to a subject as predicates. The opposition (*Bauddha*) view is that *avyapadeśya* meant that perception is contact, not with *svarūpa's* capable of becoming *viśeṣaṇa's* but with a *svalakṣaṇa* which was incapable of becoming a predicable; all the predicables being in fact *fictions*.

This might seem to support the view that Praśastapāda followed Diṅnāga, and that his *viśeṣaṇa's* are simply Diṅnāga's *kalpanā's* recast from a different angle of vision For it seems probable that Praśastapāda's position implies antecedents of which no trace is to be found in Vātsyāyana. And we find in Diṅnāga antecedents which make the view of Praśastapāda intelligible But the evidence that Diṅnāga was acquainted with views like Praśastapāda's (referred to in the note above, p. 105) seems to me strong.

[1]The five '*kalpanā's*' as stated by Vācaspati Miśra are not quite the same. See *NVT* p 102 l. 2 where they are given as name; class, quality,

(ii) Perception of Qualities. (a) Special qualities other than sound. (4 factors).

"Perception of colour, taste, smell, and touch has as its cause an organ specially appropriated to the particular quality perceived (*niyatendriyanimittam*), and arises from a contact of the organ with the thing in which the quality resides (*svāśrayasaṁnikarṣāt*)[1], as the result of the inherence of the quality in many parts (*anekadravyasamavāyāt*)[2], and of the distinctive character belonging to the quality concerned (*svagataviśeṣāt*)[3].

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act, substance, e g. It is Ḍittha it is a cow . it is white he is a cook he has a stick —Vidyābhūṣaṇa (*HIL* p 129 last line of footnotes) says that "the idea of genus (*jāti*), quality (*guna*), action (*kriyā*), and name (*nāma*) was derived from the *Mahābhāṣya* of Patañjali " It seems likely that the notion was originally derived from the grammarian's classification of words Diṅnāga's argument appears to have been that words can never express the unique character which belongs to perception—the object of which is *svalakṣana*, *sui generis* · whereas words by their very nature as conventions for communication can only deal with common characters (*sāmānyalakṣana*) To say that perception is apprehension stripped of words (*avyapadeśya*) is to say that it is apprehension stripped of all the (illusory) common characters which the different kinds of words impose upon it · that is, it amounts to saying that perception is apprehension *kalpanāpoḍha*. Perception is of the thing in its uniqueness (*svarūpataḥ*),—and the *svarūpa*, the thing in its uniqueness, is necessarily *avyapadeśya*, inexpressible. That means that nothing can truly be predicated of it. All predicables are fictions imposed upon reality They are not genuine qualifications (*viśeṣaṇa*) of the real. See *HIL* p 277 for an account of Diṅnāga's attitude.

[1]The *saṁyuktasamavāya* of later terminology The red thing is related by conjunction (*saṁyoga*) to the visual organ, and the quality—red—is in the thing by relation of inherence (*samavāya*). Therefore the relation of red to the visual organ is inherence-in-the-conjunct.

[2]*NK* p. 194 l 4 *anekeṣv avayaveṣu samavetaṁ dravyam anekadravyam tatra samavāyāt*. The quality of a single atom would not be perceptible

[3]*Ibid.* *svagato viśeṣo rūpe rūpatvam, rase rasatvam, etc ,—tasmāt* I have followed this. But it would give better sense to interpret " as a result of the special property with which the organ is endowed ".—It would be awkward to refer *sva-* in *svagata* to the organ when *sva-* in *svāśraya* refers to the quality perceived but *svagata* may be taken as a unit-word = *proprius* —so that this difficulty will not arise.

(b) Sound

(3 factors)

"The perception of sound arises from a contact which involves only three factors (*trayasaṁnikarṣāt*)[1], for sound resides in the organ of hearing itself and is apprehended through the organ alone (*tenaiva*)[2].

(c) Attributes perceptible by sight and touch

(4 factors)

"Number, extension, separateness, conjunction and disjunction, nearness and farness, viscidity, fluidity, impulse (*vega*), and movement[3] are grasped by sight and touch, as the result of inherence in perceptible substances.

(d) Psychical states

(2 factors)

"Cognitions, pleasure and pain, desire and aversion, and volition, are apprehended as the result of a conjunc-

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[1]The three factors are soul, *manas*, and organ of hearing The *artha*, or thing (other than the sense-organ) in which the quality perceived resides, disappears, because there is no contact (*saṁyoga*) between the portion of ether enclosed in the ear-channel (which constitutes the organ of hearing) and that portion of ether which is in immediate contact with the resonant body so that this cannot be a case of *saṁyuktasamavāya*, 'inherence-in-the-conjunct'. It is therefore described, in the later phraseology of the doctrine of Six Contacts, under the rubric of *samavāya*—simple inherence of the quality perceived in the perceiving organ. We do not hear the original sound (*ādyaśabda*) at all. Sound propagates itself in the ether as a succession of sounds, which may be imagined as resembling either wave-undulation (*vīcitaraṅga*) *or Kadamba-buds* (*kadambamukula*) the initial sound is produced by conjunction or disjunction of bodies (*vibhāga-*, *saṁyogajaśabda*), while the intervening sounds and the final sound (*madhyama* and *antyaśabda*) are produced by the immediately preceding sound (*śabdajaśabda*). The final sound is that inherent in the portion of ether which forms the organ of hearing · and it is this that we hear. (See *Tarkabhāṣa* pp. 136—138, with p. 31) In this sense then there is no 'object' or *artha* · and so Praśastapāda says there are only three, instead of four, factors in the *saṁnikarṣa*.

[2]Without the aid of a (conjunct) object. See last note.

[3]These are what we should call—in Locke's terminology—primary qualities. But they are not all 'qualities' (*guṇa*) on the Indian view: for the last one, movement, belongs to the category so-named (*karma*).

tion (*saṁyoga*) of two factors[1] internal organ and soul.

(*iii*) *Perception of Universals*

"The universals 'being', 'substancehood', 'qualityness', 'the character of being motion' and other universals, which reside by inherence in perceptible substrates, are apprehended by the organs which apprehended the substrates (*upalabhyādhārasamavetānām āśrayagrahakair indriyair grahaṇam*)[2].

[1]The later rubric for this form of contact is *saṁyuktasamavāya*, inherence in the conjoined (the psychical 'qualities' being inherent in the soul, and the soul being in conjunction with the internal organ). So that the rubric for inner sense perception is identical with the rubric for the external sense perception of qualities (other than sound) and of movement. This is obviously objectionable: and Praśastapāda's classification by the number of factors involved in the 'contact' has at least this advantage over the later classification, that it makes inner-sense perception very different from any form of external perception

But of course neither view is clear. In the first place the function played by mind is ambiguous, both functions—that of organ of sense, and that of organ of attention—being confused or identified In the second place there is a confusion as to the part played by soil in the 'contact'. Is it 'conjoined' as *subject* of the knowledge, or as *substratum* of the qualities which form the *object* of the knowledge? or both at once? Praśastapāda's assertion that there are only two factors in this *saṁnikarsa* implies a double identification (1) of *manas* with *indriya*, and (ii) of *ātma* and *artha* That is (*a*) the soul, as *knower*, comes in contact with (*b*) the mind as organ of attention and (*c*) the mind as organ of sense comes in contact with (*d*) the soul (as the substrate in which are inherent the psychical qualities which form the *thing known*). But $(b) = (c)$ and $(a) = (d)$ Therefore only two 'factors' are 'involved'! This marks the bankruptcy of the contact-theory when applied to self-awareness.

[2]Two rubrics are given for the perception of universals in the *Tarkabhāṣā*, viz, (*a*) *saṁyuktasamavetasamavāya* 'inherence in what inheres in the conjoined'. The pot is conjoined with the eye colour inheres in the pot. and the universal 'colour' inheres in the quality colour. But a different rubric is needed to cover the perception of the universal 'sound' (*śabdatva*), (*b*) *samavetasamavāya*: for the universal 'sound' inheres in the quality sound, which again inheres in the organ of hearing. (*c*) There is yet a third case, that of perceiving the substanceness of substance. but this comes under the rubric *saṁyuktasamavāya* (the rubric applicable to the perception of quality and movement) for substanceness *inheres* in a substance, and a substance is (when perceived) in *conjunction* with the organ of sense (The *Tarkabhāṣā* does not mention this case)

This account of the perception of the universal as a distinct form of perception, together with the notion of a universal as something which 'inheres' in substance, quality, and action or movement, implies an ultra-realistic mode of thought.

Such is perception in the case of ourselves and beings like us[1]."

Note on the Perception of Movement

Śrīdhara polemises against an opponent who admits the reality of movement but denies its perceptibility, holding that it is inferred from disjunctions and conjunctions. Śrīdhara retorts that, if this were the case, we ought to infer (when we see a monkey jumping about in a tree) that the tree is moving as well as the monkey, since the conjunctions and disjunctions inhere as much in the tree as in the monkey. The opponent answers that the monkey alters its position in space as well as in the tree; and movement on the part of the tree will not explain the former set of disjunctions and conjunctions. Śrīdhara retorts that we may suppose the monkey to move in order to explain his change of position in space: but this does not prevent us supposing the tree to move in order to explain the monkey's change of position relatively to the tree. And the opponent *must* make the latter supposition, if he is in earnest with his principle of inference, which is that the cause (movement) resides in that in which the effect (conjunction and disjunction) resides (*yadadhikaraṇam kāryam, tadadhikaraṇam kāraṇam*). The opponent answers that the supposition of movement on the part of the monkey explains both sets of positional changes at once (both relatively to space, and relatively to the tree), and that therefore there is no need to suppose movement on the part of the tree. Śrīdhara retorts that a man may be free to act or not to act, as suits his convenience · but the mind is unlike the man in this respect—it is *not* free to apply or not to apply its own principles of inference at will (*na cedam puruṣa iva cetanam yatprayojanānurodhād pravartate*). When

[1]This closes Praśastapāda's account of the varieties of normal perception, which thus omits the sixth mode of contact recognised by Uddyotakara and all subsequent schoolmen—namely, *viśeṣaṇaviśeṣyabhāva*.

certain conditions are present the conclusion follows,—when the inferential mark (middle term) is found to be related to a thing, it must establish that thing. The conclusion cannot be over-ridden by the fact that the result might be otherwise explained, as is the case with a Presumption or Implication (*arthāpatti*)[1]. The opponent then shifts his position, saying that it is only changes of position *in space* (not relatively to this or that object) which proves movement (*kriyānumitihetu*). Śrīdhara replies that conjunctions and disjunctions with imperceptible points in space are imperceptible: and if the opponent corrects himself further by suggesting that movement is inferred from the series of contacts with points on the surface of the terrestrial globe (*bhūgolaka*), then he will find it difficult to explain our apprehension of the movement of a bird flying in mid-air. Perhaps he will suggest that the middle term here is the continuous series of conjunctions of the bird with the multitude of rays[2] spread out through space: but then he will not be able to account for the tactual perception of unseen and involuntary movements of the limbs or parts of the body in the dark; nor for the perception of movement in an instantaneous flash of lightning on a night when everything is obscured in great clouds.

(The passage is at *NK* p. 194 1. 13—p. 195 1. 6, and is translated by Faddegon p. 450, who however partially misunderstands the argument.—Psychology nowadays admits that the appearance of motion is a speci-

[1]This is an unanswerable *argumentum ad hominem*. The opponent says that the monkey's movement is known by *anumāna*—which means demonstrative proof. But the very premises which are supposed to 'demonstrate' that the monkey moves, would also 'demonstrate' that the tree moves: and the opponent is not free to refuse to draw a conclusion which is 'demonstrated' by his premises. For the conclusion of a demonstration is not like a hypothesis, the force of which depends on its being the only supposition available.

[2]*viyadvitatālokanivāhavibhāgasamyogapravāha* Faddegon renders "the series of conjunctions and disjunctions with the multitude of light-beams expanded in physical space". The difficulty suggests itself that the 'light beams' are not perceptible ordinarily.

fic form of sense-experience; nor have the attempts to explain it in terms of muscular and articular sensations and local signs met much success. It is however a form of perception which is particularly prone to illusion: nor would it be easy to determine the conditions under which it could claim to be a *pramāṇa*, as the instrument of a cognition which is *avyabhicāri*. Probably the opponent had this in view when he asserted that movement is known inferentially. But Śrīdhara rightly suggests that unaided inference would point to mere relativity.—His argument would have been more interesting had it been directed against a relativist: but the opponent maintains an impossible position in asserting at once that movement is real, and yet not given in perception.)

The Perception of *Yogins*.

(*a*) in the ecstatic condition.

"In the case of *Yogins*, who are different from us,—if they are in the condition called '*yukta*', the internal organ, favoured by the qualities resulting from *yoga*, gives them unerroneous intuition of the essence (*avitatham svarūpadarśanam*) of their own souls, of souls other than their own, of 'ether', of space, of time, of atoms, of air, and of the internal organ[1],—also of qualities, movements, universals, and differences

[1]It will be seen that this supernatural perception of the *yuktayogin* (the perception of the *viyuktayogin* is merely supernormal) fills an inconvenient gap in the *Vaiśeṣika* theory of knowledge. For it provides for the perception of the (for us) imperceptible category 'inherence' and of the (for us) imperceptible six substances—ether, air, space, time, soul, *manas*: also of what is (for us) imperceptible in the three perceptible substances—namely, the atoms. The *Vaiśeṣika*, it is true, rejects Credible Testimony as a separate Means of Cognition (*pramāṇa*), and so the mere fact that the *Yogin* reports his intuition of these imperceptible matters could not be used to establish their reality: and it is consistently maintained that these things are established by inference (of the *sāmānyato dṛṣṭa* type). But there is an obvious difficulty in inference to the transcendent: and the credible testimony of those for whom it is *not* transcendent, though not a separate means of proof, is at least a valuable auxiliary to inference

(b) in the withdrawn condition.

inherent in these substances,—also of the relation of 'inherence'.—If again they are in the condition called '*viyukta*', they can have perception of the subtle, the hidden, and the remote, arising from a contact involving the four factors, and as the result of the *yoga*-generated qualities."

Perception as process (*pramāṇa*) and as resultant knowledge (*pramiti, phala*). *Pramāṇa* *Prameya*

"In the case of perception, the *instrument* is the bare sensuous intuition of the unrelated essence (*svarūpālocanamātraṁ pratyakṣaṁ pramāṇam*) of general and particular characters (*sāmānya-viśeṣeṣu*)[1]. The *objects* are

The inconvenience of making time and space imperceptible is mitigated however by treating the relations founded in time and space as qualities (*guṇa*) of things—conjunction and disjunction, nearness and farness, being enumerated among the twenty-four '*guṇas*' Relation is not a category for Indian logic,—except the relations of whole to part, of quality and movement to substance, and of the universal (*sāmānya*) to substances, qualities, and movements, which constitute the separate category of 'inherence' (*samavāya*). The relation of substances to each other, conjunction and disjunction (*saṁyoga, vibhāga*)—which covers their relation to 'time' and 'space', as substances—resolves itself (as has been stated) into a quality of the related *substances*,—a quality which is perceptible so far as the substances themselves are perceptible But the imperceptibility of 'inherence' remains a difficulty for a system of metaphysical realism which refuses to dissolve the whole into an aggregate of parts, substance into an aggregate of qualities or the universal into an aggregate of particulars

[1] *sāmānyaviśeṣa* here is difficult But this much is quite clear, that the term does not refer to the *category viśeṣa* for this is not perceptible at all

We are here concerned, not with what may be called *categorised* perception, but with the simple apprehensions or 'stuff' out of which categorised perception arises that is, with the objects of undifferentiating perception—*nirvikalpaka pratyakṣa*. And the objects of *nirvikalpaka pratyakṣa*—Praśastapāda's *ālocanamātra*—are here said to be *sāmānyaviśeṣa*, 'generals and particulars' Śrīdhara (*NK* p. 185, l 12 ff) says that Praśastapāda is here denying the view that what is given in the primary 'moment' of perception is *only* the general, and is asserting that the particular as well as the general is given in 'bare intuition.' But he goes on to point out that the object is as yet *actually* neither general nor particular—seeing that 'general' implies inclusion of others and 'particular' implies exclusion from

the categories, substance and so on[1].

Pramātṛ — The *agent* or *subject* of the cognition is the soul (*ātma*).

Pramiti — The resultant cognition is knowledge of substances etc.

The instrument in the production of 'simple apprehension'. — In the production of knowledge of 'generals and particulars', the instrument is undivided (*avibhaktam* V. L. *aviyuktam*)[2] bare sensuous intuition[3] (*ālocanamātraṁ pratyakṣam pramāṇam*). Of this there is nothing else as a further instrument (*asmin nānyat pramāṇāntaram asti*), because it has not the character of a resultant (*aphalarūpatvāt*).

others and there is as yet no question of 'others' in an intuition of *unrelated* characters. Compare Jhā's *PSPM* p. 158, where the account given of Prabhākara's view of the object of *nirvikalpaka jñāna* appears to correspond with Praśastapāda's view. See below p. 136 n. 8 *ad fin.*

[1]Śrīdhara says 'the four categories, substance etc.', which means *dravya*, *guna*, *karma*, and *sāmānya*.

[2]Whichever reading be adopted, the sense would seem to be 'undifferentiated perception' i.e. *nirvikalpaka jñāna*, simple apprehension of unrelated character without distinction as qualified and qualification under the rubric of the 'Five Predicables'. But see next note, *ad fin.*

[3]Śrīdhara explains *ālocana* as a noun of instrument here—*ālocyate 'nenety ālocanam*—'that whereby it is intuited' (*NK.* p. 198. 121), and he interprets the passage to mean that the instrument of the bare intuition is the contact between sense-organ and object; this contact being 'that whereby it is intuited'. He explains *avibhaktam* as *kevalam*, i.e., *jñānānapekṣam*, not having reference to any precedent cognition. This mere contact of sense gives rise to undifferentiated apprehension of general and particular (*nirvikalpakaṁ sāmānyaviśeṣajñānam*) as its *phala* or *pramiti*. But this undifferentiated or simple apprehension is nevertheless said to be 'not a resultant', in this sense, that it is not a resultant *of previous apprehension*. It is therefore said to have nothing else—i.e., *no other cognition*—as the instrument in its production. The case is otherwise with 'differentiated perception' (*savikalpakajñana*); for this has as its condition not merely the bare sense-contact, but also the simple apprehension (*nirvikalpakajñāna*) of the characters which become the qualifications (*viśeṣaṇa*) in

Alternative statement of perception as process (*pramāṇa*) and result (*pramiti, phala*)
Pramāṇa
Prameya
Pramātṛ
Pramiti

Alternatively (*atha vā*), the *instrument* in perception may be taken to be) the unerroneous 'undesignated' apprehension[1] in respect of all the categories[2] which is (thus) produced from the contact of the four factors. The *objects* (will in that case be) substance and the other categories. The *agent* or *subject* is the soul. The *resultant cognition* will be the recognition of things as either desirable, undesirable, or indifferent[3]."

'differentiated perception'. For *viśiṣṭajñāna* presupposes *viśeṣaṇajñāna*—judgment presupposes simple apprehension

It seems that Śrīdhara's interpretation of the passage is forced, especially in its explanation of *ālocana* as used in the present sentence But the passage remains unintelligible A distinction appears to be made between *svarūpālocana* and *avibhaktam ālocanam*, which I cannot interpret

[1]*avitatham avyapadeśyaṁ jñānam* This is a partial paraphrase of *NS* I. 1 4, repeating the term *avyapadeśyam* without explanation

[2]*sarveṣu padārtheṣu catuṣṭayasaṁnikarṣād avitatham avyapadeśyam yaj jñānam utpadyate, tat pratyakṣam pramāṇam* It seems clear from this that Praśastapāda did not understand *avyapadeśyam* in the sense which Vācaspati Miśra puts upon it, i e. as the equivalent of *nirvikalpakajñāna* or of *svarūpālocanamātra* On the contrary he is equating it with *savikalpakajñāna*-knowledge of qualified objects 'in all the categories' This is a resultant of *ālocanamātra*. But it can itself be the instrument of a further result · and when it is thus instrumental its further result is realisation of the practical bearings of the objects perceived. He is merely repeating what Vātsyāyana had said · indeed the present passage may be a reference to Vātsyāyana, *NBh* p. 10 *ll* 1-2—*akṣasyākṣasya prativiṣayam vṛttiḥ pratyakṣam vṛttis tu saṁnikarṣo jñānaṁ vā. yadā saṁnikarsas, tadā jñānaṁ pramitiḥ yadā jñānaṁ tadā hānopādānopekṣābuddhayaḥ* "Perception is the functioning of the several sense-organs in relation to their respective objects The functioning may be regarded as consisting either in the contact of organ and object, or in the knowledge When the *contact* is taken to be the functioning of the organ, then the *knowledge* is the resultant cognition But when this *knowledge* itself is taken to constitute the functioning, then the resultant cognition will be ideas of the object as desirable, undesirable, or indifferent".

[3]Compare Jhā *PSPM* p 41 *ad fin*. p 42, where Prabhākara is stated to draw a precisely similar distinction between two ways of regarding the *pramāṇa* and the *phala*. The distinction became a commonplace of the later schools. But its philosophical significance is by no means clear.

SECTION 9 'SIMPLE APPREHENSION' AND COMPLEX PERCEPTION (*NIRVIKALPAKA* AND *SAVIKALPAKA*)

How can the *immediate* of Perception be *mediated* in a Perceptual Judgment?

Diṅnāga's characterisation of perception as 'stripped of characters'[1]—*kalpanāpoḍha*—is taken by the schools as the text for the treatment of this topic[2]. But the discussion is complicated by reference to the question of the relation of language to thought, and by a polemic against the views of certain 'Nominalists' (*śābdika*)[3]

[1]How *can* you characterise the characterless? This is the burden of Uddyotakara's criticism of Diṅnāga, a criticism which, as Keith says (*ILA* p. 71), amounts to the retort that "a consistent sensationalism should be speechless, and therefore unable to give the definition suggested". As Uddyotakara puts it, the theory is like a dumb man's dream—it cannot be communicated (*NV* p. 45 l 9 *apratipādakatvān mūkasvapnasadṛśam*).

[2]*NV* p. 44 l 1 cites the phrase *kalpanāpodham*, and *NVT* p. 102 l 1 says that Diṅnāga's definition is the object of Uddyotakara's criticism in the passage Vidyābhūṣaṇa (*HIL* p 277, footnote) cites Diṅnāga's description of perception in Tibetan as from Chap I of the *Pramāṇasamuccaya*, and says that the Sanskrit equivalent is *pratyakṣaṁ kalpanāpoḍhaṁ nāmajātyādyasamyutam*

I have not met the second half, as here given, anywhere cited. The couplet cited in the *Sarvadarśanasamgraha* is later than Diṅnāga, containing as it does the term *nirvikalpaka* It is perhaps from Dharmakīrti. *kalpanāpoḍham abhrāntam pratyakṣaṁ nirvikalpakam vikalpo vastunirbhāsād asamvādād upaplavah* (Chapter on the *Bauddhas, ad fin.*). The second line of th s couplet is quoted by Śrīdhara *NK* p 190 l 18 (with *visamvādād* in place of *asamvādād*) The *SDS*, *ibid*, goes on to quote another couplet as if fr m the same context —

> *grāhyaṁ vastupramāṇām hi grahanam yad ito 'nyathā na tad vastu*
> *na tan mānaṁ śabdaliṅgendriyādijam*

The meaning of the two couplets seems to be —

> "Unqualified perception is stripped of characters and unerring qualification is an accretion, since it disagrees with the appear ance of the thing For the object (in perception) has the thing itself as the means by which it is validly cognised · apprehension in any other way than this (i e. apprehension not immediately derived from the *thing*) is not reality and is not proof,—neither proof by testimony nor by inference nor by perception" (Gough's translat.on p 33 is different)

[3]Vācaspati Miśra cites the *Vākyapadīya* as typical of this view (*NVT* p 83 l. 9) —

> *na so 'sti pratyayo loke yaḥ śabdānugamād ṛte anuviddham iva jñānaṁ sarvaṁ śabdena gamyate.*

"There is no thought known to experience which is without correspondence with a word · the whole of knowledge is as it were pierced and threaded with words".

who appear to have taught that words and thoughts are inseparable. It is against these 'nominalists' that Vātsyāyana's explanation of the word '*avyapadeśya*' in the *sūtra* is supposed by the commentators to be directed. As against these nominalists[1], *avyapadeśya* asserts that there is a moment in perception separable from all use of language[2]. It seems likely[3] that Diṅnāga took this nominalist view as the starting-point from which to develop his own position. He takes 'name' as the first of the five characters, of which he asserts the pure percept to be devoid: and it may be supposed that his own view was arrived at by accepting on the one hand the *Śābdika's* view that the thoughts through which we determine reality are inseparably connected with words; and, on the other hand, the *Naiyāyika* view that what is immediately given in perception is independent of the words by which we come to designate it. But if concepts are inseparable from words, and the percept is separable from words, it follows that the percept is separate from all concepts or determinations of thought.

This same couplet is cited in the *Tārkikarakṣā* (p. 61) where the view is ascribed to the '*Śābdikas*', and is said to amount to the assertion that only perception with qualifications' exists—i.e. there is no such thing as *nirvikalpakajñāna*. The view is thus represented as the antithetical error to that of the Bauddhas, who hold that only unqualified perception—*nirvikalpakajñāna*—is valid.

[1]But when Vācaspati is polemising against the view that the pure percept is devoid of *all* characters he gives another interpretation of *avyapadeśya*, as being a possessive compound meaning 'having no *vyapadeśya* *Vyapadeśya* in this compound means *viśeṣya*, thing-to-be-qualified or subject and so *avyapadeśyajñāna* comes to mean knowledge of qualifications *unrelated* to a thing-qualified. *NVT* p. 82 l. 8 That is, *nirvikalpa* is certainly (as against the nominalists) *śabdarahita*: but this does not mean that it is (as Diṅnaga supposed) *kalpanārahita* or characterless. On the contrary, it is *jātyādisvarūpāvagāhi* (*NVT*, *loc cit*).

[2]It is illustrated by the experience of infants and dumb persons, e g. by Kūmarila in the *Ślokavārtika* (*pratyakṣa*, 112) :—

asti hy ālocanajnānaṁ prathamaṁ nirvikalpakaṁ
bālamūkādivijñānasadṛśaṁ śuddhavastujam

'There is a primary intuitive apprehension, an unqualified perception, arising from the mere real,—like the apprehension of infants and the dumb".

This couplet is quoted in the *Tārkikarakṣā*, p 60, in this connection.

[3]See Vidyābhūṣaṇa *HIL* p. 277, and footnote 1 on page 109 *supra*.

So that the *Naiyāyika's* description of the percept as not verbal (*avyapadeśya, aśābda*) becomes equivalent to describing it as free from those other determinations or qualifications—of class, quality, action, and attendant circumstances or accident[1]—which, through the use of words, we assign to the reality present to sense.

The Buddhist is represented[2] as holding that only pure or unqualified perception (*nirvikalpaka*) is entitled to the name of perception. He understands by pure perception an appearance (*pratibhāsam*) which is true to the real (*vastuny abhrāntam*) as conforming positively and negatively to the *svalakṣaṇa*[3], the unique moment of

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[1] *dravya*, as one of the five *viśeṣanas* or *kalpanās* (predicables), means some relation to another thing or substance, which serves, in virtue of this relation, to qualify the given thing as a stick qualifies a man who *carries* it, or horns qualify the cow which *has* them Attendant circumstance or accident is thus a fair rendering

[2] By Srīdhara, in *NK* p 130 l 4 ff His polemic against the Buddhist view of perception falls into two halves (a) p 130 l. 4 to p. 131 l. 22, dealing with the view that only *nirvikalpaka* is valid, and not *savikalpaka*; and (b) p. 131 l 22 to p 134 l 3, dealing with the view that perception is *kalpanārahita*, and that the knowledge of *kalpanā's* constitutes '*savikalpaka*' But after all these are only two different ways of saying the same thing, viz, that all thought-determinations are illusory as not immediately given Srīdhara is really meeting the same position twice over, with different sets of arguments. The confusion is due to the different senses in which *nirvikalpaka* is used by the *Bauddha* and the *Naiyāyika* respectively. the *Bauddha* understanding by it perception *free from* all *vikalpa's*, while the Naiyāyika uses it of the perception of *unrelated vikalpa's*

[3] Cf. *Nyāyabindu* p 103 *tasya* (*i e. pratyakṣasya*) *viṣayah svalakṣanam yasyārthasya saṁnidhānāsaṁnidhānābhyāṁ jñanapratibhāsabhedas tat svalakṣanam Tad eva paramārthasat, arthakriyāsāmarthyalakṣanatvād vastunaḥ Anyat sāmānyalakṣaṇam · so 'numānasya viṣayaḥ.*

"The object of perception is the *svalakṣaṇa*. The *svalakṣaṇa* is that through proximity to and remoteness from which differences in the cognitive appearances arise It alone is ultimately real, since competency for action is the definition of real thing. Other objects are *sāmānyalakṣana*,—such is the object of inference".

The *Nyāyabinduṭīkā* (p 15 l 18) explains · *svam asādhāraṇaṁ lakṣaṇaṁ tattvaṁ svalakṣaṇam vastuno hy asādhāraṇam ca tattvam asti sāmānyaṁ ca yad asādhāraṇām tat pratyaksagrāhyam* "*svalakṣana* means 'own unique character or being.' For a reality has a unique being, and it has also a common character. The unique character is the object (*grāhya*) in the case of perception".

Dharmottara goes on to say that the object (*viṣaya*) of a *pramāṇā* is twofold: either the object of apprehension (*grāhya*)—described by the phrase *yadākāram utpadyate*-that in the 'form' of which knowledge arises (?)

existence which alone is ultimately real (*svalakṣaṇānvayavyatirekānuvidhāyipratibhāsam*[1]). All the 'predicables' (*viśeṣaṇa*) or determinations of thought (*vikalpa*), are untrue to reality (*bhrānta*), because they are not appearances born of the thing (*anarthajapratibhāso vikalpaḥ*); being appearances which do not conform to reality (*vastvananurodhipratibhāsa*), their production

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or the object of acquisition, endeavour, or activity (*prāpaṇīya*, *adhyavaseya*, cf. *pravṛttiviṣaya* p. 16 l 6). "*anyo hi grāhyo, 'nyas cādhyavaseyaḥ Pratyakṣasya hi kṣaṇa eko grāhyaḥ Adhyavaseyas tu pratyakṣabalotpannena niścayena saṁtāna eva Saṁtāna eva ca pratyakṣasya prāpaṇīyaḥ, kṣaṇasya prāpayitum aśakyatvāt*", i.e. the object apprehended in perception is the single moment but this cannot be the object of endeavour or achievement,—the '*prāpaṇīya*' of perception is not the single moment but the *series* of moments (which of course is unreal) He adds that in inference, on the other hand, the object apprehended (*grāhya*) is an unreality (*anartha*) but this unreal is illusorily imposed on the real (*āropita*), and is conceived of as *svalakṣaṇa* (*svalakṣaṇatvenādvasīyate*) the *svalakṣana* thus 'supposed' (*svalakṣaṇam adhyavasitam*) being the object of activity (*pravṛttiviṣaya*)

Poussin (translation of the *Sarvadarśanasaṁgraha* chapter on the *Bauddhas—Muséon*, n s ii, 1901, p 172, footnote 50) cites these passages, and concludes that *svalakṣana*=*kṣana*

As regards the unreality of the object of inference *cf*. the passage cited from Diṅnāga at *NVT* p 127 l 1 *sarvo 'yam anumānānumeyabhāvo buddhyārūḍhena dharmadharmibhāvena na bahihsadasattvam apekṣate* "All this business of inference and inferred things depends on the subject-attribute relation imposed by thought, and has no reference to the existence or non-existence of external things".

In what sense there can be nearness to or remoteness from a *svalakṣaṇa* so defined remains obscure

[1] cp. *NV* p. 44 ll 2—4 with *NK* p 190 ll. 5-6 and *Nk* p 191 ll 23 24. Uddyotakara says · *apare tu manyante pratyakṣam kalpanāpoḍham iti atha keyam kalpanā? nāmajātiyojaneti yat kila na nāmnābhidhīyate, na ca jātyādibhir vyapadiśyate, viṣayarūpānuvidhāyiparicchedakam, ātmasaṁvedyam,—tat pratyakṣam iti* "Some hold perception to be devoid of *thought-determination—kalpanā* What is this determination, this *kalpanā*? It consists in synthesis with name, and with class. The percept is that which is not designated by a name, nor determined by class and the other predicables; it has a shape corresponding to the unique character of the object; and is self-cognised".

(Jhā takes *paricchedakam* as a separate word 'definite', observing in a footnote that this implies validity)

The *vijñānavādin* Buddhist held that cognitions are not perceived through inner sense perception by *manas*, but are somehow conscious of themselves. *Ātma* of course does not mean the soul or self—which the Buddhists rejected. The *Sarvadarśanasaṁgraha* states *svayaṁ-vedanam* [*svasaṁvedanam*] as the fundamental doctrine of the *Yogācāra*, i.e *vijñānavādin* school. In this connection the school used the simile of the lamp—which, self-illumined, illuminates objects. You do not need another lamp to see your lamp by.

being conditioned by ' psychical dispositions ' (*vāsanādhīnajanma*).

We have what seems a perfectly definite perception of a jar of such and such a shape, quite distinct from all other jars. But the Buddhist tells us that all the determinations (*vikalpa*) which make the supposed ' percept ' definite are appearances not derived from the real thing, and that our belief that the thing as thus determined is real, is illusory—

vikalpo vastunirbhāsād visamvādād upaplavaḥ.—But is it not the fact that there *is* correspondence in actual practice (*pravṛttau saṁvādaḥ*)?—The Buddhist replies that the supposed correspondence is due to the fact that the determinations derived from previous experience illusorily impose their own appearances, under the guise of identity with the real thing; and, while obscuring the difference between the *svalakṣaṇa* and their own manifestations in consciousness, direct men's activities on the place where the *svalakṣaṇa* is—thus ensuring the ' correspondence ' which is alleged[1]. The gleam of a precious stone is not the stone itself : but it enables us to get it !

But unless the thought determination (*vikalpa*) is in contact with the thing (*vastu saṁspṛśati*), how could it impose itself as identical with the thing? Even a mirage has an objective ground !—The reply is that thought uses the percept as a vehicle (*pratyakṣapṛṣṭhabhāvī vikalpaḥ*) and so, assuming the function of the instrument of knowledge, presents to us a thing that can be acted upon (*arthakriyāsamarthaṁ vastu sākṣātkaroti*), —otherwise the person desirous to act could not act on the basis of his thought-determinations. This is what the Buddhist writer meant when he said " thence also it is on the real thing that we act as a result of thought-determinations " (*tato ' pi vikalpād vastuny eva pravṛttiḥ*).

[1] *NK* p 190 l. 20 *svalakṣaṇadeśe puruṣam pravartayati saṁvādayati ca.*

—But does not this amount to the admission that thought (*vikalpa*) is after all a means of knowing the real thing, seeing that it is the source of apprehensions which correspond with the real thing (*vastuni pramāṇam, tatrā-visaṁvādipratītihetutvāt*)?—The Buddhist tries to avoid the admission by saying that between the momentary existence which is the real object (*grāhya*) of the perception and that which is the 'object' (*adhyavasīyate*) of the thought, and between this latter again and the 'object' achieved (*labhyate*) in the ensuing activity, there is—*regarded as momentary existents*—no correspondence, because they are all momentary[1]. Regarded merely in the light of an *exclusion of what is other*, we can indeed find a certain correspondence in the percept, the idea, and the object achieved,—if we abstract from the (real) diversity which belongs to them as absolutely distinct 'moments' of experience (*anākalitakṣaṇabhedasya ata-dvyāvṛttavastumātrāpekṣayā saṁvādaḥ*). We cannot say that the object of perception *is* the object as determined by thought, nor that either of these *is* the object achieved or got practically. But we can say that the object grasped in perception is *like*[2] the object as determined by thought, and that the latter is *like* what is achieved by activity (*yādṛśaḥ kṣaṇaḥ pratyakṣeṇa gṛhyate, tādṛśo vikalpenā-dhyavasīyate, etc.*)[3]. But even so the thought-determination (*vikalpa*) will not be an independent means of

[1]For the distinction between the *grāhya*, on the one hand, and the *adhyavaseya* or *prāpaṇīya* or *pravṛttiviṣaya*, on the other hand, see *NBT* p 15 l 20 to p 16 l 7 referred to above, note 3 p. 121 (That passage only makes a twofold distinction in objects (*viṣaya*), whereas Śrīdhara makes it threefold here by distinguishing the *adhyavaseya* of the *vikalpa* from the *pravṛttiviṣaya*) The difficulty is that the doctrine of the momentariness of the real destroys the unity of the object (*viṣayaikatā*). Having destroyed it, the Buddhist casts about for some way of restoring it—for practical purposes.

[2]The Buddhist admits resemblance (*sādṛśya*) though he denies *sāmānya*.

[3]The question is (as we should put it)—what is the relation between the previous impression, the mere idea, and the subsequent impression? Not numerical identity—all are momentary, and the one has disappeared before the other begins to be. But a sort of likeness.

knowledge, seeing that it only apprehends the already apprehended[1] (And what the Buddhist is arguing here is that *vikalpa* is not a *pramāṇa*). For it is by *perception* and nothing else that an object of this character (which now appears in '*idea*') was originally grasped). . .

We (the *Bauddhas*) admit however that a thought determination derived from an inference (*liṅgaja*) is an independent means of knowledge,—because it apprehends something of which the unique being has not been already grasped by another means of proof, i.e. by perception (*pramāṇāntarāprāptasvalakṣaṇaprāpakatayā pramāṇam*[2] (But this is another matter.)

—This position too is unsatisfactory, replies the *Naiyāyika*. For the momentary existent's 'exclusion from-what-is-other' (*anyavyāvṛtti*)—and the unreal common character illusorily imposed upon it in virtue of this negative character of excluding-what-is-other—[3] is *not grasped* (*gṛhyate*) by perception, seeing that the object (*grāhya*) of perception is characterised by the *Bauddha* as a 'cause' (*hetu*), and unreal things (such as this illusorily imposed common character of being different-from-what-is-other) are devoid of all practical

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[1]Like memory, which on this ground is refused the name of *pramāṇa* in the Indian schools. The original experience is the instrument of knowledge—not the memory, which only repeats the original experience. So with 'ideas' (in the Humian sense),—they only repeat 'impressions', and are not therefore an independent instrument of knowledge. The idea only apprehends over again what has been apprehended in impression.

[2]*svalakṣana* in this compound cannot be taken as the object of *prāpakatayā*, because inference never grasps the *svalakṣaṇa*, its object being always *sāmānyalakṣana*—see *Nyāyabindu* p. 103 l. 13 *anyat sāmanyalakṣaṇam. so 'numānasya viṣayaḥ*

[3]Poussin, *op. cit* p 78 note 46, observes that the doctrine of *apoha*, " la non-compatibilité avec ce qui est autre ", is inseparable from the theory of *svalakṣaṇa* He cites from *Ātmatattvaviveka* 48. 8, a definition—*yac cātyantavilakṣanānām sālakṣanyavyavahārahetus, tad anyavyāvṛttirūpam*—" exclusion of what is other is the ground of the practical notion of sameness of character in things which are absolutely diverse in character " According to the *Bauddha* '*sarvam pṛthak*'—the atomistic principle which finds expression in the doctrine of *svalakṣana* or *kṣaṇa*—there cannot be any *positive* resemblance in reals A cow is like a cow in virtue of what both are *not*

efficacy (*samastārthakriyāvirahāt*),—(and therefore could not be a ' cause ' of perception or of anything else). It is the momentary existent that possesses practical efficacy, and so is real (*paramārthasat*); and it is this therefore that is the object of perception. (And so it is impossible for the Buddhist to deny that thought is a means of cognition on the ground that its objects have already been given in perception: i.e. on the ground *gṛhītagrāhitavāt*.)—And it cannot be said that the object of the thought is one with the object of perception, because the percept is a momentary existent and is said ' not to extend up to the time of the thought ' (*vikalpakālānanupātīty uktam*).

And if it be allowed that there is some single object—of unexplained character—common to the thought and the perception, which could admit of a correspondence for practical purposes (*pravṛttisaṁvādayogya*), thought would not fall outside the definition of a source of knowledge, because (1) the idea has no reference to impressions which might have preceded it in determining the object, the case being similar to that of a series of relatively independent impressions derived from an object[1]; and (2) because what has been conceived in thought is capable of being applied in action (*adhyavasitaprāpaṇayogyatvāt*).—And, if thought[2] is thus established as a source of knowledge, it must be classed under the head of perception, because (1) the thought-determinations by which the object in perception is qualified are not referred to the object through a middle term (so that the process is not *inferential*); and (2) because it occurs when organ and object are in contact,

[1]*dhārāvāhikabuddhi* Faddegon explains · " streamlike intellection, i e. a series of intellections, all referring to one object, and arising when our attention remains fixed upon a certain object for a certain time ".

[2]i.e., of course, *vikalpa* in the special sense of ' the work of the understanding ' in constituting the object of ' qualified ' perception (that is, of the perceptual judgment).

and does not occur otherwise (so that it must be regarded as *indriyārthasaṁnikarṣotpanna*)[1].

But although these determinations of the percept are no less produced by the object (*arthaja*) than the pure or unqualified percept (*nirvikalpaka*), the qualified perception of the object does not arise through the *mere* contact of organ and object. A further condition is necessary. This condition (according to Śrīdhara) is the remembering of the word[2] which names the qualification in question (*vācakaśabdasmaraṇa*).—In that case, the Buddhist objects, ought not the thought-element in perception to be classed under memory[3] as being generated by a memory and not by organ-and-object? for the part played by organ-and-object is eclipsed (*vyavahita*)

[1]But it occurs when *another* organ than that which would give the '*vikalpa*' in question is in contact with the object, e.g. I *see* the *fragrant* sandal. The eye cannot *see* the fragrance though the fragrance as thus belonging to a perceived object is not a free idea but 'sense-bound and sense-sustained'. (Ward, *Psychological Principles*, p 186) This case is recognised as a form of *alaukikasaṁnikarṣa* (i e 'contact' in other than the usual sense) under the name *jñānalakṣaṇāpratyāsatti*, in the later schools the example being that given above of the fragrant sandal (*surabhi candanam*). Cf. Ward, *op cit*, p. 168 "The manner in which the constituent elements of a percept are combined differs materially from what is strictly to be called the 'association of ideas' To realise this difference we need only to observe first how the sight of a suit of polished armour, for example, instantly reinstates and steadily maintains all that we retain of former sensations of its hardness and smoothness and coldness, and then to observe next how this same sight gradually calls up ideas now of tournaments, now of crusades" etc.

[2]The importance here given to words is surprising. We might be prepared to admit that judgment—holding subject and predicate apart—is dependent on the use of words, i e that judgment is inseparable from proposition. But judgment is perhaps a stage beyond qualified perception', *savikalpakajñāna*. An opponent has pointed out (*NK* p 189 l 15) that the actions of brutes incapable of language imply qualified perception of objects (*śabdavyutpattirahitānām api tiraścām arthavikalpāt pravṛttiḥ*), and has maintained on this ground that all perception is in fact 'qualified perception'. Śrīdhara fails to answer this difficulty.

[3]In which case it would not be a *pramāṇa*. See note 1 p. 125 *supra*.

by that of memory. The *Naiyāyika* replies that auxiliary circumstances (*sahakārin*) do not oust the inherent power of the thing: you would not say that the seed is *not* the cause of the production of the shoot on the ground that it is eclipsed by auxiliary conditions of growth like earth and water!—But what is the assistance (*upakāra*) rendered by the memory of the word to the organ and object, that it should be called an "auxiliary circumstance"?—The answer is that, as the thought-determination in its arising corresponds positively and negatively to the organ-and-object, so also does it correspond positively and negatively to the word-memory[1] The assistance rendered by the memory to the organ-and-object then is that, organ-and-object alone failing to produce their effect, they produce it when the memory of the word is present as an auxiliary circumstance. And the Buddhist's view that "characters which *add* nothing to the inherent nature of the thing itself would not be 'auxiliaries'[2]" has already been rejected[3] when we

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[1]The thought-determination occurs (other conditions being fulfilled) when organ and object are present, and does not occur when either is absent Similarly it occurs (the other conditions being present) when the memory of the word is present, and does not occur when the memory is absent

[2]*svarūpātiśayānādhāyino na sahakāriṇa iti* cp *NK* p 73 l 25 *yadi sahakāriṇo bhāvasyātiśayaṁ na janayanti nāpekṣaṇīyā akiṁcitkaratvāt* "unless the so-called auxiliaries produce some additional character in the (principal) cause itself, they need not be taken into account, because they effect nothing". See the following note

Śrīdhara's discussion which has been given above is not a very profitable piece of scholasticism I give it for want of an earlier (and better) treatment of this topic.

[3]The Buddhist argument in support of the doctrine that all things are momentary is stated in the *Sarvadarśanasaṁgraha*, chapter on the *Bauddhas* (the section corresponding to pp 16—20 of Gough's translation). It is also expounded in the pair of tracts by *Ratnakīrti* entitled *kṣaṇabhangasiddhi*, which are included in Hara Prasad Śāstri's *Six Buddhist Nyāya Tracts in Sanskrit* (One of these tracts sets out the positive and the other the negative argument.) The *Naiyāyika* reply is given by Śrīdhara *NK* pp. 73—82 (Faddegon analyses this passage pp. 593—5, and translates it pp 384—403) The context in which Śrīdhara refutes the theory of momentariness is the *ātmanirūpaṇa* or exposition of soul as the *permanent* subject of experience.

had occasion to refute the doctrine of momentariness (*kṣaṇabhaṅga*).

The Buddhist starts by identifying existence with causal efficacy (*arthakriyākāritva*) He then exposes the antinomies of the concept of causation in a manner similar to that of F. H. Bradley in *Appearance and Reality*, arguing that a *permanent* entity is inconsistent with production of effects—*kramākramavyāvṛttāv akṣaṇikāt sattvavyāvṛttiḥ*, "a permanent entity cannot exist because its various effects cannot be produced either successively or simultaneously" (*SDS loc. cit.*). *Not simultaneously*: because if it could produce all its effects at once it would do so, and would produce them as much at one time as at another,—unless you suppose that having discharged itself of all its efficacy once and for all it retains an altogether impotent sort of 'permanency' thereafter; which would be like looking for a crop from the grain that the mice have eaten (*sthāyitvavṛttyāśā mūṣikabhakṣitabījād āv aṅkurajananaprārthanām anuharet. SDS*). *Nor yet successively*: for what can produce an effect does so forthwith—*samarthasya kṣepāyogāt* "postponement being out of question in the case of what has the capacity" (this phrase occurs in *SDS loc. cit.* and in *NK* p. 73 l 23 Poussin p. 64 note 24 renders "il ne convient pas que celui qui est capable d'un acte le diffère" and refers to *NVT* p 388 l 18 and 27 and p. 389 l. 8, where the same phrase is twice repeated. It is the stereotyped formula which sums up the dialectical attack on permanent causes). And conversely what does *not* produce an effect is incapable of producing it. In virtue of these two principles (called the *prasanga* and the *prasangaviparyaya*) it is clear that the supposed permanent entity possesses two contradictory properties · for it both has, and has not, the capacity to produce its effects it has the capacity, in so far as it is now producing its (present) effect, and it has not the capacity, in so far as it is *not* now producing its (past and future) effects.

It is at this stage in the discussion that the *Naiyāyika* brings in the notion of auxiliary conditions (*sahakārin*, which Poussin renders *co-facteur*). *nanu kramavat sahakārilābhāt sthāyinaḥ* (*sic*) *atītānāgatayoḥ krameṇa karaṇam* (Poussin, for textual *kramaṇam*) *upapadyate*—"the successive production of past and future effects by the permanent entity is possible as the result of its getting auxiliaries in succession". The Buddhist asks · does the auxiliary render any service (*upakāra*) to the entity or not? If not, we may disregard them, as, doing nothing, they cannot serve its purpose—*nāpekṣaṇīyās te, akiṁcit kurvatāṁ teṣāṁ tādārthyāyogāt* (this is the reading of the 1902 Bombay text, confirming Poussin's conjecture for *tādātmyāyogāt*). But if they do give any assistance, does the assistance remain something distinct from the entity, or not? *If it remains something distinct*, then it is this something distinct from the permanent entity that is the cause of the effect—since the effect is present when this adventitious additament (*āgantukātiśaya*) is present, and absent when it is absent. (Even in the light of Poussin's rendering, p. 66, I cannot understand the citation in the *SDS* at this point. Gough mistranslates it) But the *Naiyāyika* holds that it is the permanent entity, in conjunction with the auxiliaries that produces the effect, and so it is from the nature of the thing (*svabhāva*) that the effect arises. It will however be no easy matter for the permanent entity to grapple these 'adventitious additaments' to itself (as it must do to produce its effects)—since (by hypothesis) it does not depart from its own nature (*svabhāvasyānapāyāt*). "It must not let its auxiliaries go—it must hold them with a noose round their neck even as they are making off, in order to

SECTION 10. THE DOCTRINE OF THE REAL UNIVERSAL

A partial answer to the Buddhist attack on the 'percept'—*savikalpaka pratyakṣa*—is to be found in

produce the effect which is to be produced" (*sahakāriṇo na jahyāt, pratyuta pālāyamānān api gale pāśena baddhvā kṛtyaṁ kāryam kuryāt. SDS*) Now when the entity (*bhāva*) takes to itself a *distinct* additament (*atiśaya*), x, in the form of the service (*upakāra*) rendered by its auxiliary (*sahakārin*) does the additament produced by the auxiliary generate another additament, or not? If it does, there will be an infinite regress of additaments and auxiliaries, if it does not, the so-called auxiliary will not be an auxiliary (Vācaspati contents himself with this brief indication of the dilemma at this point—*upakārāśyopakārāntarajanane anavasthānāt, ajanane tu sahakāribhāvābhāvāt. NVT* p. 388 l 24).

The dilemma amounts to this A. If the additament leads to no further additament then (*a*) the effect might appear at any time at which the so-called causal entity might happen to add to itself the additament You can only avoid this consequence by *adding* that the causal entity takes on the additament only when *in relation to the auxiliary* (*bījam atiśayam ādadhānam sahakāriṣāpekṣam evādhatte*) (*b*) the so-called casual entity—the seed, for example—might be no cause at all, the effect being produced by the additament To avoid this contingency you will have to *add* that the additament or 'service' (*upakāra*) is an additament or service *relating to the causal entity*, e g the seed

In order to avoid the above horn of the dilemma you must adopt the second alternative But in doing so you fall into a many-faced *regressus ad infinitum* (*bahumukhānavasthā*), thus :

B If the additament is thus admitted to lead to further additaments, then (*a*) You have *added to the seed* which has the additament which makes it productive the further additament of relation to the auxiliaries But as this further additament, like the former, can only be generated by the seed *in relation to an auxiliary* (*tasmin apy upakāre pūrvanyāyena sahakāriśāpekṣasya bījasya janakatve*), there will be an infinite regress of additaments arising in the seed after acquiring successive auxiliaries (*sahakāriśampādyabījagatātiśayānavasthā prathamā*). (*b*) You have *added to the additament* itself, or service rendered, the further additament of *relation to the causal entity* (i e the service must be service *to the seed* · a qualification is thus added to 'service'). But this entails a second regress arising from the series of additaments-resident-in-additaments generated by the seed (*bījādhijanyātiśayaniṣṭhātiśayaparamparāt iti dvitīyānavasthā*) The service to the seed is an additament qualified by the further additament 'to the seed': and this further additament will be qualified by the still further additament that it is an additament *to the additament*: and this still further additament is a yet still further additament to the additament-to-the-additament-to-the-seed,—and so *ad infinitum*. In order to relate x to a, the service to the seed, we must conceive x as having the further characteristic *of y* i e of being related to a And then we must conceive y as having the further property z, symbolising its relation to x · and so on. Relatedness in fact means an infinite series of terms. [See McTaggart's *Nature of Existence* pp. 88-89 "every characteristic of a substance generates an infinite series of characteristics of that substance . . . If we start with an original relationship,

the assertion that the universal (*sāmānya*) is a perceptible reality distinct from the particular. Śrīdhara says : " if we shall be able to show that the universal is real, then the apprehension of the characters (by which we determine objects in 'differentiating perception') will have these real universals for its objects, and will be *perceptual* apprehension because produced by (contact between) sense-organ and object[1]". The real universal is an *object of sense* no less than the particular : so that sense-perception gives not a bare 'this', as the Buddhist supposes, but determinations also. Śrīdhara sums up the *Naiyāyika* reply to the *Bauddha* as follows : "Thought which grasps objects as qualified (*viśiṣṭagrāhin*) . . . is not a 'fiction of the understanding'; because the qualification, the qualified thing, and the relation between them in virtue of which they are determinand and determinant, are all real (*vāstavatvāt*)[2]".

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there is the derivative quality of standing in that relationship, the derivative relationship between the substance and that quality, and so on again without end ". McTaggart however adds that these infinite series are not vicious, because it is not necessary to complete them in order to determine the meaning of the earlier terms] (*c*) In the same way the seed takes on another characteristic in virtue of its being related to the service rendered (*evam apekṣyamāṇenopakāreṇa bījādau dharmiṇy upakarāntaram ādheyam*) and so there arises a third regress resulting from the series of additaments having as their substrate the additament to the seed imposed by the service rendered (*upakārādheyabījātiśayāśrayātiśayaparamparāt tṛtīyānavasthā*).

Thus both horns of the dilemma (arising from the first main alternative, called by Vācaspati '*bhinnopakārādhāna*', i e. that the addition made by the auxiliaries is something *distinct* from the causal entity or primary cause) lead to impossible consequences We now pass to the second main alternative, that the addition is not something distinct,—*abhinnopakārādhāna* (*NVT* p. 388 l. 21 and l. 24 uses both these terms).

If the service rendered by the auxiliary is *not* distinct from that to which it is rendered then the latter, the supposed permanent causal entity, ceases to exist, and is replaced by a new entity, viz , the causal entity *plus* the added quality The original *A* has been replaced by an *Ax* But this is just what the Buddhist maintains in his doctrine of the *kurvadrūpa*, the immediate momentary antecedent of the effect That is, the admission that the additament forms part of the supposed permanent entity when added to it, amounts to the admission that there *is* no permanent entity. Q E. D.—*phalitam mamāpi manorathadrūmeṇa* " the tree of my desire has borne its fruit "

[1] *NK* p 193 ll 4—6

[2] *NK* p 193 ll 17—18 *evam pratītir* . . *viśiṣṭagrāhinī na kalpanā, viśeṣanasya viśesyasya ca tayoh sambandhasya ca vyavacchedya-vyavacchedaka-bhāvasya vāstavatvāt* The reality of the '.relation' here

To this the *Bauddha* replies: "Cognition which grasps the real thing is engendered from contact of the organ with the thing just so as the thing is,[1] and does not proceed by first reflecting upon the thing (*na tv arthe vicārya pravartate*). Apprehension of a thing as qualified (*viśiṣṭajñāna*), on the other hand, is a reflective process. A man says to himself 'this is the qualification', 'this is the thing qualified', 'this is the relation between them', 'people do not talk about a stick with a man, but a man with a stick': and after thus reflecting on each of the factors separately he makes a unity of them, and cognises 'a man-with-a-stick' (*paścād ekīkṛtya gṛhṇāti*). If the qualifiedness of the thing were *real* (*yadi vāstavī viśiṣṭatā*), the apprehension of the thing as qualified would arise from the very first. If it does not do so, this means that the qualifiedness does not belong to the thing in its own nature (*svarūpataḥ*), but is constituted by some superadded condition (*upādhikṛta*)[2]".

The doctrine of the real universal makes its first appearance in the seventeen *sūtras* which form the second *āhnika* of the first *adhyāya* of the *Vaiśesika Sūtra;* and Praśastapāda's brief treatment of the topic[3] seems to follow the teaching of the *Sūtra* fairly closely. *Diṅnāga* attacks the *Vaiśeṣika* doctrine in a fragment[4] of six lines preserved in the *Sarvadarśanasaṁgraha.* Prabhākara replies to his criticism, and enunciates the realistic doctrine in a different form[5]. There is, besides, a passage in the *Nyāyasūtra*[6] which, in dealing

spoken of is of course fundamental. And I do not know that the *Nyāya-Vaiśeṣika* school have any satisfactory account of it to offer. The doctrine of the real universal is not a complete solution.

[1] *yathābhūto 'rthaḥ, tathopajāyate,* i e it should be an immediate impression in point-to-point correspondence with the reality or archetype.

[2] *NK* p. 193 ll. 19—24 As observed in a note just preceding, our school hardly deals with this difficulty · unless we can find a solution in the *Vaiśeṣika* doctrine of categories. I do not think we can.

[3] *PBh* pp. 311—314 See also *ibid* p. 11 and p .19.

[4] See *Fragments from Diṅnāga*, fragment Q.

[5] Jhā, *PSPM*, pp. 94—101.

[6] *NS* II. ii. 65—71.

with the nature of words, distinguishes the 'class' (*jāti*) from the individual (*vyakti*) and from the 'form' (*ākṛti*), i.e. the mark by which a class-nature is recognised: but there is nothing said as to the ontological character of this '*jāti*' which is merely defined by 'production of the like' (*samānaprasavātmikā jātiḥ NS* II.ii.71) and seems to be what we should call a natural class. It seems that the doctrine of the real universal was primarily a *Vaiśeṣika* doctrine; though the *Nyāya-sūtra* also knows it.[1]

The *Vaiśeṣika Sūtra* teaches that *sāmānya* and *viśeṣa* are relative to thought (*sāmānyaviśeṣa iti buddhyapekṣam* I ii.3). The meaning of this seems to be explained in the two following *sūtras* which say that Being (*bhāva*=*sattā*) is *only sāmānya*, because it is the ground of inclusion *only* (*anuvṛtter eva hetutvāt*); while 'being a substance', 'being a quality', and 'being action' are both *sāmānya* and *viśeṣa*. *Sūtra* 6 says that *sāmānya* resides elsewhere than in 'ultimate differences' (*anyatrāntyebhyo viśeṣebhyaḥ*). The universal 'Being' is what is meant when we assert existence of substances, qualities, and actions: it is a different thing from substances, qualities, and actions (*dravyaguṇakarmabhyo' rthāntaram sattā* I.ii.8). It is neither action nor quality, because it resides in 'actions and qualities'[2] (9) · moreover there is absence in it of *sāmānya* and *viśeṣa*[3] (10). After

[1]Greek influence could be suspected, but there is nothing to prove it

Reference to the *Vaiśeṣika* doctrine of the eternity of the universal is clear (e g) in *NS* II ii 15 *na, ghaṭābhāvasāmānyanityatvān nityeṣv apy anityavad upacārāc ca* The previous *sūtra* has taught that sound is non-eternal because it is an object of sense-perception This *sūtra* objects that universals are objects of sense-perception and yet are eternal

[2]No specific argument is given that it is not substance. But this follows as a corollary · *for if it* were a substance we should have the absurd consequence that substance resides in actions and qualities—the reverse of which is the truth.

[3]*sāmānyaviśeṣābhāvena ca* This same formula is repeated in *sūtras* 12, 14 and 16 as a proof of the reality of the subordinate universals 'being substance', 'being quality', and 'being action'. Universals do not reside in universals, but only in substances qualities, and actions This

similarly arguing the reality of the subordinate universals *dravyatva*, *guṇatva*, and *karmatva* (*sūtras* 11-16), the section concludes with the assertion that Being is one because the character of 'existence' is not different (in the various things which are said to exist), and because there is no specific mark (through which we assert existence)[1]. The perceptibility of universals is asserted in another passage (VS VII. i. 13)[2], but there seems to be no statement that they are eternal[3].

It has been held that VS I.ii.3 asserts the subjectivity of the universal, and that therefore the *Sūtra* does not teach the doctrine of the real universal. But it is out of the question to assert this in the face of the explicit statement of I.ii.8, and of the general sense of the section. The doctrine of the *Sūtra* is fundamentally that taught by Praśastapāda in the *Bhāṣya*.

"Universals are of two kinds, primary and subordinate. The universal is ubiquitous within its proper sphere[4], identical[5], resident in more than one substrate[6], and is what makes us think of a thing as

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was the constant doctrine of the school and it led to the awkward consequence that 'Being', as a universal, is not predicable of universals themselves.

[1]*sad iti liṅgāviśeṣād viśesaliṅgābhāvāc caiko bhāvaḥ* I. ii 17

[2]*etena guṇatve bhāve ca sarvendriyaṁ vyākhyātam.* "By this it is explained that there is knowledge of the universals 'being quality' and 'being' through all sense-organs". It is not clear why only these two universals are mentioned presumably *dravyatva* and *karmatva* are thought of as *implied* At any rate the statement must apply to them also.

[3]But it must have been a doctrine of the school before Praśastapāda, since (as stated above, p. 133 n. 1) it is referred to in the *Nyāya Sūtra* · and it is impossible that the *Nyāya Sūtra* should have been redacted after the date of Praśastapāda.

[4]Cowhood is present in all cows.

[5]Because the essence whereby it resides in one cow is the identical essence whereby it resides in another cow, there being no difference in the conception of cow-nature in different cases.

[6]If you say that it is impossible for one thing to reside in many, the answer is that impossibility cannot be asserted of a thing which is established by a valid means of cognition—in this case, by perception. *na hi pramāṇāvagate 'rthe kācid anupapattir nāma.* NK p. 313 l. 6. Experience shows cowhood resident in many cows.

conforming to its essence—whether the thing be one individual, or two, or many. In other words, without losing its identity it is resident in a series of substrates, and is the ground of the thought of one nature running through all. How so? When we have a series of experiences of this, that, and the other individual, a mental disposition or impression is generated by the thought of repetition, and thereby the series of past experiences is remembered, and we realise that the factor of commonness which runs through them all (*sāmānyāpekṣam . . . yad anugatam*) is the universal.

The primary universal (spoken of above) is the universal 'Being' (*sattāsāmānya*), and gives rise to the thought of inclusion (*anuvṛtti*)[1] *only*. As the result of contact of a single indigo-stuff with leathers, cloths, blankets, and so forth, all of which are different from one another, there arises an identical thought about them all, viz , that each of them is blue[2] : and in the same way we have an identical thought about substances, qualities, and actions, which are all different from each other, viz., that they all *exist* (*sat sad iti pratyayānuvṛttiḥ*)[3]. And this thought must come from *something other*[4] than substances, qualities, and actions, as such. This 'something other' is the universal 'Being';—the reality of which is thus established. From union with the universal 'Being' the identical thought recurs in the case

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[1] *anuvṛtti*, *anugama*, etc , are troublesome to translate The idea is that of the one in the many,—one nature *running through* many individuals, to which all *conform* 'Inclusion' is not an accurate rendering, but practically convenient.

[2] This passage (or something similar) is referred to by Uddyotakara in *NV* p. 319 l 16. See above, p. 28 n. 3

[3] This phrase has a variety of forms. Sometimes we find *anuvṛttipratyayaḥ*, sometimes *anuvṛttapratyaya*, here *pratyayānuvṛttiḥ* Similarly when *anugama* and *anugata* are substituted for *anuvṛtti* and *anuvṛtta*.

[4] *arthāntarād bhavitum arhati* Compare *VS* I. ii, 8—*dravyaguṇakarmabhyo 'rthāntaraṁ sattā.*

of each thing that it *is*: and therefore 'Being' is a universal, and the Summum Genus[1].

'Being substance', 'being quality', 'being action', and the rest[2] are subordinate universals, because they are the ground of the thought of exclusion as well as of inclusion (*anuvṛtti-vyāvṛtti-pratyayahetutvāt*). A subordinate universal is thus both genus (*sāmānya*) and species (*viśeṣa*)[3]. Thus substance-hood is a genus

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[1]*tasmāt sattā sāmānyam eva* He seems to combine two thoughts here (*a*) that *sattāsāmānya* is a reality, and (*b*) that it is *only sāmānya*, never *viśeṣa*—i.e that it is the Summum Genus—as stated in *VS* I ii 4

[2] 'the rest' means the universals subordinate to substance-hood, quality-ness, and action-hood,—e g *pṛthvītva*, *rūpatva*, *utkṣepanatva*, etc. It comprises all universals other than *sattā*

[3]*viśeṣa* suffers from an unfortunate ambiguity

(*a*) As one of the categories of the *Vaiśeṣika* system it means those ultimate differences which separate unique entities such as atoms from each other. Each of these entities is regarded as absolutely *sui generis*, and so their differences are not specific differences in fact about these differences nothing can be said except that they *are* differences The difference of one atom from another is not in virtue of some character *which it shares with anything else*; but in virtue simply of its own uniqueness Such a difference therefore cannot be *specific* If it were, you would again have to look for a difference to distinguish the members of the species—and so *ad infinitum*. If you are to avoid this infinite regress, you must admit sooner or later the reality of unclassable uniqueness of character And this is *viśeṣa* as an ultimate *category* This category suggests, and perhaps has, some relation to the Buddhist conception of *apoha*.

(*b*) But—in a secondary sense, as Praśastapāda himself says just below—specific differences are also called *viśeṣa* And these *viśeṣa's* are in fact *sāmānya's*, universals, because they are the common property of a class of things. In the vast majority of cases in which the term *viśeṣa* is used, it is used in this latter sense—naturally so, since *viśeṣa* in the other sense is a mere surd or fullstop to thought, about which there is nothing to say except to assert its existence. It is commonly said that the *Vaiśeṣika* system derives its name from the *category viśeṣa*. But Faddegon argues, on good grounds, that in fact the system is so called by reason of its characteristic method of proceeding *sādharmyavaidharmyābhyām*, 'through likeness and difference'. These differences (*vaidharmya*) are of course *viśeṣa* in the so-called secondary sense, and not the category *viśeṣa*, which is not available for the practical purpose of drawing distinctions The *Vaiśeṣika* school is characteristically 'the school of distinctions'.

Ui states that later Vaiśeṣika manuals sometimes erected *sāmānyaviśeṣa* into an additional category, side by side with *sattāsāmānya*, on the one hand, —which is only *sāmānya*—, and with *viśeṣa* (the category) on the other hand, —which of course is only *viśeṣa* (never *sāmānya*). We often meet the compound *sāmānyaviśeṣa*, and it can usually be translated 'specific universal', 'subordinate universal', being used to distinguish all *other* universals from

because it is the ground of a thought which comprises the different 'substances', earth and the rest: and it is a species because it is the ground of a thought which excludes substances from qualities and actions.. ...[1].

But these universals, substance-hood, and the rest are in the primary sense genera (*sāmānyāni*), because they comprise many things: it is in a secondary or transferred sense (*bhaktyā*) that they are called '*viśeṣa*', from the fact that they differentiate their substrates (from other things)[2].

That these universals constitute a separate category (*padārthāntaratva*) from substance, quality, and action is established by the difference in their characters (*lakṣaṇabhedāt*) And for this very reason (i.e. that they are different from substance, quality, and action), universals are eternal[3] And universals are *different* from each other because they are determined to residence in substances[4], and so on. and because the thought of one

sattāsāmānya, the universal 'Being' The use of this term to denote the objects of *āloçanamātra*, bare intuition, in the section on perception in the *Bhāṣya*, constitutes one of the difficulties of that section We know that some held the view that the object of *nirvikalpakajñāna* (=*ālocanamātra*) was simply 'Being' And Śrīdhara tells us that Praśastapāda meant that not merely *sāmānya* but also *viśeṣa* was apprehended in 'bare intuition' That is, 'bare intuition' apprehends universals *of all sorts*,—not only 'Being', but also 'being substance', 'being quality', etc

('All sorts of universals' is of course a phrase condemned by the *śāstra* each universal has *svarūpasattā*, and we may not *class* them. But even Praśastapāda says *sāmānyaṁ dvividham* !)

[1]For brevity I omit eight lines of the text, which show, in the same way, that the same thing is true of *all* subordinate universals.

[2]*svāśrayaviśesakatvād bhaktyā viśesākhyāni* On this see the last note but one.

[3]Śrīdhara says "If universals were identical with substances, etc., they would perish on the destruction of the substance, etc., and would come into being with its origination But as they are different, this rule does not hold". *NK* p. 315 l 6 For the 'difference in character', see the definition of the universal with which the present passage of the *Bhāṣya* opens. Eternity was *not mentioned* in the definition, *no doubt* because Praśastapāda intended to treat it as a corollary from the definition

[4]Some universals reside in substances, others in qualities, and so on: and this determinate choice of substrates shows difference in the universals themselves. *NK* p. 316 l 20.

universal differs from the thought of another universal. And each universal is *one*, because it shows no difference of character as residing in its several substrates, and because there is no character of difference[1].

Although universals have no determinate location (*aparicchinnadeśāni sāmānyāni*), nevertheless each is 'ubiquitous *within its proper sphere*' because the conditions under which each is manifested are determinate (*upalakṣaṇaniyamāt*), and because there is a definite totality of conditions requisite for the production of the individuals which manifest the universal (*kāraṇasāmagrīniyamāt*)[2]. And universals are not to be indicated in space (*antarāle avyapadeśyāni*) because they cannot reside there either by relation of conjunction (*samyoga*) or by that of inherence (*samavāya*) ".

In an earlier passage[3] which treats of the likenesses and differences (*sādharmyavaidharmya*) of the categories, Praśastapāda mentions seven characteristics common to the three categories of Universality, Ultimate Difference, and Inherence, which differentiate them from the other three categories, Substance, Quality, and Action.

" The three categories of Universality, Ultimate Difference, and Inherence have the characteristics (1)

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[1]*pratyekaṁ svāśrayeṣu lakṣaṇāviśeṣāt viśeṣalakṣaṇābhāvāc caikatvam.*

Compare *VS* I. ii 17 *sad iti liṅgāviśeṣād viśeṣaliṅgābhāvāc caiko bhāvaḥ*. Praśastapāda makes the insignificant change of *liṅga* into *lakṣaṇa* in quoting. The more important modification which he introduces is in the application of the formula, which in the *sūtra* is used to establish the unity of *sattā*, Being, only, whereas Praśastapāda uses it to prove the unity of *every* universal. The result of this modification is that the second phrase in the formula, *viśeṣalakṣaṇābhāvāt*, ceases to have any distinct meaning. Śrīdhara tries to give it a distinctive meaning by interpreting *lakṣaṇa* (in the second phrase) as *pramāṇa*—" there is no means of *proving* difference ".

[2]i.e. because a universal only shows itself in a particular kind of thing, and because things of that particular kind do not come into existence at random, but under fixed causal conditions. Śrīdhara glosses the first phrase by *abhivyañjakasya avayavasaṁsthānaviśeṣasya niyatatvāt*—because the special collocation of parts which manifests the universal is fixed by rule.

[3]*Bhāṣya*, p. 19, l. 1.

that their Being consists in their own essence or unique nature (*svātmasattva*); (2) that they have thought for their characteristic (*buddhilakṣaṇatva*); (3) that they are not effects; (4) that they are not causes; (5) that they do not possess genus and species (*asāmānyaviśeṣavattva*); (6) that they are eternal; (7) that they are not called 'things' (*arthaśabdānabhidheyatva*)".

The following observations may be made under these seven heads :—

(1) Substances, qualities, and acts are held to exist in virtue of a universal 'Being' residing in them. In other words these three categories all exist in the same sense · existence is a class-notion applicable to all these three categories. In their case *sattāyogaḥ sattvam*—existence consists in being united with a universal 'Being' —as Śrīdhara expresses it But we cannot bring the universal 'Being' itself under the same class-concept : we cannot say in this sense that 'Being *is*'. For this will lead to an infinite regress (*anavasthā*), since it means that Being has a Being, which again has a Being . . . *ad infinitum*. Nor can we bring any of the other *universals* under a further universal without falling into an infinite regress. Blue *things* possess blueness, but blueness does not possess blueness-ness; for if the latter supposition were made[1], there would be no limit to the multiplication of super-universals.

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[1]At a later time Udayana formulated the six *jātibādhaka*, or impediments to universality, in a couplet which became the current coin of the schools *vyakter abhedaḥ, tulyatvaṁ, saṁkaro, 'thānavasthitiḥ, rūpahānir, asaṁbandho, jātibādhakasaṁgrahaḥ*

(i) A class must include *more than one thing*, so that there can, for instance, be no class-nature of ether (*ākāśatva*) ·

(ii) the same thing under different names will not give rise to a class-notion, e.g *śaśi, candra, vidhu* are three names for the moon, but do not indicate a class-nature ' moon-ness ' ·

(iii) the *bhūtadravya's* are earth, water, fire, air, and ether, while the *mūrtadravya's* are earth, water, fire, air, and mind—therefore there would be ' confusion ' if *mūrtatva* and *bhūtatva* were *sāmānya* ·

(iv) universals (*sāmānya*) *do not imply a class-nature* 'universal-hood' (*sāmānyatva*), because this would involve *infinite regress* :

And similarly we must not say that the various universals are all universals in virtue of a universal nature 'universal-hood' (*sāmānyatva*) belonging to all universals as such.—And yet we do say that this, that and the other universal *exist* : and we do say that this, that and the other universal *are universals*. Does not this universalising function of thought imply a *real* universal 'Being' residing in universals, and a *real* universal 'universality' which makes them all alike universals?—Praśastapāda's reply amounts to saying that there is really no universalising function of thought implied in the assertion that the various universals *exist* and in the designation of them all as *universals*. Each is unique in its existence and in its nature : and the use of a common term,—'existence', 'universal',—does not here imply any real community of character.

(2) This probably means, as Śrīdhara explains[1], that thought itself is the proof of the reality of the universal, when its reality is contested (*vipratipannasāmānyādisadbhāve buddhir eva lakṣaṇam* : *lakṣaṇam* being glossed by *pramāṇam*). It is true that, on Praśastapāda's view, the universal is perceptible, and therefore perception is the means of knowledge (*pramāṇa*) by which we apprehend it. But, in dealing with an opponent who refuses to admit that the universal is given in perception, the

(v) ultimate differences (*viśesa*) have no common nature (*viśeṣatva*) for they would then *forego their own nature*, since *ultimate* differences can have nothing in common

(vi) finally, inherence (*samavāya*) cannot have inherence-ness resident in it, because there is *no relation* available by which such 'residence' could be explained,—for the supposition that inherence-ness resides in inherence by inherence involves infinite regress

This arbitrary limitation of 'real universals' has parallels in Greek thought. Socrates protested against it.

[1]Keith, ILA, p. 193, footnote, says that *VS* I ii 3 is 'badly explained away' in this passage as meaning that the existence of universals is proved by thought He thinks that the *sūtra's* do not teach a realistic view of the universal But Praśastapāda, who certainly does maintain what Keith himself calls a 'rigid realism', uses this phrase *buddhilakṣaṇa* And he can only have meant what Śrīdhara says he meant As to the meaning of the *sūtra* I. ii. 3, see above, p. 133.

appeal lies to the universalising function of thought, *anuvṛttipratyaya*. And it is in fact on this that Praśastapāda relies in order to establish the reality of the universal.

(3) The universal is not an effect, in this sense that it has a subsistence independent of the individuals in which it inheres (*kāraṇānapekṣasvabhāvatva*). A whole (*avayavi*) is an effect of which the parts in which it inheres are the constitutive cause (*samavāyikāraṇa*). But this cannot be said of a universal, which (unlike a whole) subsists before and after any individual in which it inheres.

(4) A universal is not a constitutive cause, nor a non-constitutive cause (*asamavāyikāraṇa*). It must however be allowed to be an occasion or occasional cause (*nimittakāraṇa*): for it is the occasion of our *thought* of the universal.

(5) This is explained under (1) Śrīdhara however interprets *sāmānyaviśeṣa* here as meaning specific or subordinate universal, *aparajāti*.

(6) Universals are eternal because they endure while individuals arise and perish.

(7) By the writer's own convention (*svasamaya*) the word 'thing' is not applied to universals

Dinnāga's dialectic against this realistic view is preserved in a fragment cited in the *Sarvadarśanasamgraha*[1] Praśastapāda does not reply to any criticisms of the kind which Dinnāga brings. But Prabhākara's doctrine seems to have similar criticisms in view. "Though the *Jāti* or class-character is eternal, yet when a new individual belonging to that class comes into existence, what is brought into existence . . . is not the class-character, which is ever present, but only the relation (inherence) of the individual to that class-character

[1] Dinnāga, Fragment Q.

There is nothing objectionable in the 'production' of 'inherence', because inherence, according to Prabhākara, is not eternal (as held by the logician)[1]'. Prabhākara differs from Praśastapāda in refusing to admit *sattā*, 'Being', as a universal, apparently on the ground urged by the Bauddha critic as reported in the *Sarvadarśana-saṁgraha*, that there is no common form running through things so different as Mount Meru and a mustard-seed[2].

SECTION 11 RECOLLECTION, ATTENTION AND ASSOCIATION

In a passage in the *Nyāya-sūtra* which discusses memory it is suggested first that recollection is brought about by a specific kind of conjunction between *manas* and the soul. The traces of past experience inhere in the soul, and are serially roused when *manas* makes contact with the part (*pradeśa*) of the soul concerned. See

[1]Jhā, *PSPM*, p 100

[2]Śrīdhara has two digressive passages in his comment on *PBh* here, viz , *NK* pp 315-316, translated by Faddegon p 502 ff , and *NK* pp 11—13, translated by Faddegon p. 360 ff. The former deals with an objector who maintains that the universal is both different from and non-different from the particulars , (*bhedābheda*), on the ground that if you take the universal in abstraction from the particular it has no content left to distinguish it from other universals. Universality, as such, only means inclusion—it will be the same in one universal as in another, and will not provide a content by which one universal is distinguished from another. Bare universality is an empty thought-form, deriving all its content from the particular from which therefore it cannot be regarded as separable. But on the other hand the cow-hood which is thus inseparable from cow Blots and cow Spots and identical in both (for you cannot say ' Spots is a cow—and so Blots is *not a cow*), is at the same time differentiated from this or that particular—because the cow-hood of Blots, being at the same time the cow-hood of Spots, cannot be identical with Blots herself for Blots is *not* Spots, though both are cows (*śāvaleyātmakasya gotvasya bāhuleyātmakatve siddhe śāvaleyād bhedo 'pi siddhyati* *NK* p. 315 l 21).

By similar reasoning it is argued that the universal is not merely eternal, as the *Vaiśeṣika* holds, but at once eternal and non-eternal (*nityānitya*), because it both survives and does not survive this and that individual. When Spots dies, *her* cow-hood dies also; but the cow-hood of Blots survives.

The other passage reviews various definitions of ' being ', put forward in opposition to the *Vaiśeṣika* doctrine of universal ' Being '.

NS III. ii. 25 *jñānasamavetātmapradeśasaṁnikarṣān manasaḥ smṛtyutpatter na yugapadutpattiḥ*—we do not have all our memories simultaneously because memory arises from contact of *manas* with a part of the soul in which the knowledge is inherent. In modern phrase, memory depends on attention to a particular sphere of experience: and we do not attend to everything at once. In *Naiyāyika* phrase, though *ātman* is all-pervading (*vibhu*), *manas* is atomic: so that, though soul as such is potentially all-knowing, attention limits the actuality of knowledge to one thing at a time. It is then suggested that *manas* has to go outside the body in order to make contact with the 'parts of the soul in which the knowledge resides'; but then the objection arises that in the temporary absence of *manas* the function of maintaining bodily equilibrium would fail and a man would fall whenever he was occupied with attending to his memories. (We solve precisely the same difficulty by entrusting such function as maintaining equilibrium to 'subconscious process'). A suggested answer is that rapid return of *manas* (swift alternations of attention) may meet the case: but this is rejected on the ground that recollection may be a protracted process. But the truth is that *manas* always functions within the body (*antaḥ śarīravṛttitvād manasaḥ*—*NS* III ii 26). Life itself, as Vātsyāyana says (*ad loc.*) is the contact of *manas* with embodied soul · and there can be no question of the *manas* going outside the body. It might also be asked: what sends it outside the body and directs it to a particular 'place' in the soul? If the soul directs the attention, then the soul knows already and there is no need of attention! And yet it cannot be by chance that attention hits the mark: nor yet can *manas*, the organ of attention itself know where to go—for it is not the knower (the soul is the knower): and so it seems impossible to suppose a specific mode of contact between *manas* and

soul (See *NS* III.ii.31—*ātmapreraṇayadṛcchājñatābhiś ca na saṁyogaviśeṣaḥ*). But this line of objection is set aside by the *sūtra*, because it proves too much: for when a man's attention is concentrated on something else and he hurts his foot, his attention returns to his body and he is conscious of the hurt: but the objection just urged as to impossibility of directed attention would apply to this case, which is an unquestionable fact: and therefore that objection cannot be valid. (*NS* III.ii.32—*vyāsaktam-anasaḥ pādavyathanena saṁyogaviśeṣeṇa samānam*—It is the same as the specific contact of *manas* with *ātman* which comes about through injury to the foot of a man whose attention is absorbed.)

The reason why we do not remember everything at once is that, besides the contact of *manas* and *ātman* and the existence of traces of past experience there are other conditions of recollection. namely, concentration (*praṇidhāna*), and apprehension of associates of various kinds. These other conditions not being permanent but occasional, different recollections arise at different times. (*NS* III. ii 33—*praṇidhānaliṅgādijñānānām ayugapad-bhāvād ayugapatsmaraṇam*.)

No attempt is made to reduce 'association' to laws, but *sūtra* 42 enumerates twenty-two conditions[1] of recall, namely: *concentration, context, repetition; signs* (classified by Vātsyāyana as fourfold—the conjoined, as smoke is the mark of fire: the resident, as horns are the mark of a cow: the co-resident, as hand is the mark of foot, both being co-resident in the body: and the opposite, as the non-existent of the existent); *marks*, as a brand or

[1]*praṇidhāna, nibandha, abhyāsa, liṅga, lakṣaṇa, sādṛśya, parigraha, āśritasaṁbandha, ānantarya, viyoga, ekakārya, virodha, atiśaya, prāpti, vyavadhāna, sukhaduḥkha, icchādveṣa, bhaya, arthitva, kriyā, rāga, dharmā-dharma*. (Vātsyāyana takes *sambandha*, in the compound *aśrayāśritasam-bandha*, as a separate head=relation, as a person living with the teacher reminds you of the teacher himself. This is arbitrary. I have followed Vātsyāyana's interpretation and used his illustrations in other cases; but he may have ministerpreted the meaning of the *sūtra* in some cases here.)

an animal makes us think of its stable; *likeness*, as a picture reminds us of a man; *possession*, as property reminds us of the owner and *vice versa; dependence*, as leader and follower; *immediate sequence*, as in things which are to be done (each step reminds one of the next to be taken); *separation*, which makes a man think of the person from whom he is separated; *unity of function*, as one man who does anything makes us think of another who does the same thing; *enmity*, as of two rivals one reminds us of the other; *excess*, which reminds us of that by which the excess is generated (Vātsyāyana gives no illustration, and it is not clear what he has in mind); *acquisition*, which reminds us of the source from which the thing has been got; *covering*, as a scabbard reminds us of a sword; *pleasure-pain*, which reminds us of their causes; *desire and aversion*, for a man recollects what he likes or dislike; *fear*, which makes us think of the source of the fear; *suppliancy* reminds us of things supplicated, such as food or clothing; *action*, as a chariot reminds us of the charioteer; *love*, for a man thinks of the woman he loves; *merit and demerit*, for as the result of merit there is memory of another birth and in this life retention of what has been read or heard; and as the result of demerit a man remembers the instruments of previously experienced pain (the explanation of this last rubric remains obscure).

The enumeration is interesting. It contains at least three different classes of 'conditions of recall', viz.—(1) concentration, context, and repetition. *Concentration* is defined as the application of attention (*manaso dhāraṇam*) through desire to remember; or, thinking of the marks of the thing to be remembered (*susmūrṣitaliṅgacintanaṁ*). *Context* is the connection of topics in a single passage. *Repetition* means a mental disposition or trace which is produced by repetition and is a quality of the soul (*abhyāsajanitaḥ saṁskāra ātmaguṇaḥ*).

(2) Associated objects. The single head *liṅga*, in its fourfold meaning as interpreted by Vātsyāyana will cover some at least of the other cases of association. Most of the cases would be classed as 'association by contiguity' in popular psychology. But 'likeness', and some cases of recall by 'similarity of function' would come under 'association by similarity.' 'Context' might be classed here under the general head of 'contiguous association', but implies a 'mental set' or attitude which makes it a class apart.

(3) Moods or emotions or sentiments or feelings of the subject. Pleasure-pain, desire-aversion, fear, love obviously belong here. 'Separation' and 'suppliancy,' perhaps, as implying emotional moods which facilitate recall, are related to this head.

'Immediate sequence' implies conative unity, which relates it to 'context' and 'concentration'. 'Repetition' really belongs to a class apart, as being a condition of retention rather than an occasion of recall · and the mythological rubric of 'merit-demerit' (which would stand for inherited and instinctive disposition, in modern phraseology) should go along with 'repetition'.

CHAPTER III

INFERENCE

atha tatpūrvakaṁ trividham anumānaṁ, pūrvavac cheṣavat sāmānyato dṛṣṭaṁ ca

tad idaṁ hetūdāharaṇayoḥ sāmarthyaṁ paramasūkṣmam duḥkhabodhaṁ paṇḍitarūpavedanīyam

The general nature, and the varieties, of inference—The *nyāya*, or demonstrative method—The formulation of the syllogism, and the functions of its members—The canon of syllogism, or *trairūpya*—Classification of fallacious middle terms—Fallacious proposition, and fallacious exemplification—Syllogistic The wheel of reasons, or nine valid and invalid types of syllogism—Syllogistic, continued Purely positive and purely negative types of syllogism—Uddyotakara's criticism of the interpretation of the *trairūpya* by the help of '*avadhāraṇa's*'—Vācaspati Miśra's criticism of Dharmakīrti's doctrine of the '*samuccīyamānāvadhāraṇa*'.

SECTION 1 NATURE AND VARIETIES OF INFERENCE

The earliest Indian formulation of inference which has survived is probably that contained in the *Vaiśeṣika Sūtra*[1]. Inference is there defined as *laiṅgikaṁ jñānam*, 'knowledge from a mark or sign'. This inferential mark —middle term—is of two kinds; *dṛṣṭaṁ liṅgam* on the one hand; and *adṛṣṭam or sāmānyato dṛṣṭaṁ liṅgam* on the other hand. The 'mark' functions inferentially in virtue of certain real relations in which things stand to each other, and which are enumerated in an aphorism of

[1]Faddegon, *VS*, pp. 296 and 300, gives the following list of *sūtra's* bearing on inference II. i. 8—10 and 15—17; III. i. 8—18; III. ii. 6—8; and IX. ii. 1-2 and 4.

the *Vaiśeṣika Sūtra* (IX. ii.1). Very notable is the absence of all reference to the function of the example in inference, with one dubious exception (*VS* IX.ii.2); and the absence of any doctrine of the 'members' of the syllogism, which plays so large a part in the *Nyāya Sūtra*. The *Nyāya Sūtra* uses the word *liṅga*, but its regular word is *hetu*, reason or ground. It stresses the function of the example, making inference turn on resemblance (*sādharmya*). And, instead of naming real relations as the basis of inference, it defines the function of the *hetu* through the general conception of 'probativeness' (*sādhyasādhana*), derived from likeness to examples (*udāharaṇasādharmyāt*)[1]. The doctrine of the *Nyāya Sūtra* probably represents a later phase of logical development than that of the *Vaiśeṣika-sūtra* : and it stands for a different way of thinking, really, although the early syncretism of the two schools has obscured the initial difference in standpoint. The *Vaiśeṣika-sūtra* is interested in the inferential process as such, whereas the *Nyāya* is interested in demonstration; the *Vaiśeṣika* therefore did not formulate a syllogism, which is essentially the form of argument rather than of inference; and he did not think of inference as an appeal to examples, but based it directly on the real relations of things. The *Naiyāyika*, on the other hand, was from first to last a *tārkika*, a disputant, and therefore thought in terms of argument; with the result that he attached exaggerated importance to *examples*, as the instrument for confuting an adversary. Had Indian logic developed on the basis of the *Vaiśeṣika-sūtra* it would have been a very different thing in all probability : and perhaps it would have given a truer account of the essential nature of inference.

The real relations on which inference is based are enumerated in *VS* IX.ii.1 as follows : "Knowledge

[1] *NS* I. i. 34.

through an inferential mark is where *this* is (a) effect of, (b) cause of, (c) conjoined with, (d) opposed to, (e) resident in, *that* " (*asyedam kāryam kāraṇam saṁyogi virodhi samavāyi ceti laiṅgikam*). But there are clearly recognised two different kinds of the inference based on these real relations, according as the 'mark' is 'seen' or 'unseen' (the latter case is commonly described as 'seen from likeness'). These two types of inference (*dṛṣṭaliṅga* and *adṛṣṭaliṅga* or *sāmānyato dṛṣṭaliṅga*) are referred to in numerous *sūtras* (e.g. II.i.8, 10, 15, 16; III. ii.6, 7) : and the principal examples of the application of the latter type of inference are the arguments proving the existence of a soul as the substrate of the psychical qualities and the existence of wind as the substrate of hot-cold touch. These are two of the nine substances (*dravya*) which the system recognises. They are both imperceptible, although their qualities are perceptible : and therefore their existence has to be established by an inference. But plainly it will not be an inference of the ordinary kind which establishes the imperceptible · and hence the necessity of admitting a special type of inference for the purpose.

This twofold division of inference is found also in other early schools, and may have been borrowed by them from the *Vaiśeṣika*. Śabara in his *Bhāṣya*[1] on the *Mīmāṁsā* says " Inference is of two kinds · that in which the relation has been experienced in perception (*pratyakṣato-dṛṣṭasambandha*), and that in which it is experienced from likeness (*sāmānyato-dṛṣṭasambandha*) ".

[1]Page 10 l 12 Kumārila objects · "The division of inference into two kinds is impossible, because the connection between reaching a place and movement is seen by perception, no less than the connection between smoke and fire. It may be said that there is no perception of this connection *in the sun* but neither is there perception of the connection between smoke and fire *in the hill* " Praśastapāda's distinction, referred to below, takes the force out of this objection

As an example of the former class Śabara gives the inference from smoke to fire : as an example of the latter the inference that the sun moves from the fact that it changes its place, on the basis of the experience that change of place on the part of a person is always preceded by movement (*Devadattasya gatipurvikāṁ deśāntaraprāptim upalabhya*) Vātsyāyana gives the same illustration of *samanyato dṛṣṭa* inference[1]. The point of the example is that the movement of the heavenly bodies is a thing beyond direct experience. But the original application of this type of inference is to something which transcends experience in a completer sense than this : and the *Sāṁkhya Kārikā* (verses 5 & 6) is nearer to the original doctrine when it says *sāmānyatas tu dṛṣṭād atīndriyāṇāṁ pratītir anumanāt* " knowledge of things beyond the senses comes from *sāmānyato-dṛṣṭa* inference ". Gauḍapāda is giving the right illustration when he says that the existence of *prakṛti* and *puruṣa* is thus inferred.

The distinction then was originally a very real and important one. The *Vaiśeṣika-sūtra* notes as a peculiarity of the *sāmānyato-dṛṣṭa* type that it does not lead to a definite or specific conclusion—*sāmānyato dṛṣṭāc cāviśeṣaḥ*[2]—and this is perhaps the reason for the name

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[1]It is also given in *Vyāsa bhāṣya* on *YS* I 7, though the two kinds of inference are not there distinguished, and by Gauḍapāda in his comment on the *Sāṁkhya Kārikā*, as an example of *sāmānyatodṛṣṭa* inference

[2]Compare *VS* II. i 9—17 ⟩
closely parallel, and certain *sūtras*
compared with III ii 6—8 That the passages have explicit reference to one another is clear from III ii 5 Both passages note that the conclusion is indeterminate, *aviśesa* (Kumārila remarks that in that case the process is not inference—*anumāna*, but implication—*arthāpatti* which is an acute and on his view of inference just, observation)

The difficulty about the apprehension of wind (*vāyu*) for the *Vaiśeṣika* is that it has not *udbhūta-rūpa*, 'manifest colour'. A substance like earth is considered to be perceived because in addition to its specific property of odour it is also visible. But when a substance has no *udbhūta-rūpa*, it is held that the substance, as such, is not perceived, but has to be inferred from its peculiar property.

given to it, partly. From psychical qualities you can infer the existence of *a* substrate: and you can adduce scriptural authority for saying that the 'soul' is this substrate: but the inference in itself tells you nothing as to the precise nature of this substrate, which, as thus inferred, remains quite indeterminate[1].

The distinction as thus understood is preserved intact by Vātsyāyana in one of the explanations which he offers of the term *sāmānyato-dṛṣṭa* in *NS* I.i 5; though it remains doubtful whether this was the real meaning of the *sūtra*. As an illustration of this sense of the term he gives the argument from psychical qualities to the existence of soul. His analysis of this kind of inference is worth quoting. "*sāmānyato dṛṣṭaṁ nāma yatrāpratyakṣe liṅgaliṅginoḥ sambandhe kenacid arthena liṅgasya sāmānyād apratyakṣo liṅgī gamyate, yathecchādibhir ātmā. icchādayo guṇāḥ, guṇāś ca dravyasaṁsthānāḥ tad yad eṣāṁ sthānam, sa ātmeti.*" "The *sāmānyato dṛṣṭa* inference is where, the relation between the Mark and the Subject not being perceived, an unperceived Subject is inferred from the likeness of the Mark to something[2]: as the Soul is inferred through desire and the like. Desire and the like are qualities; and qualities are grounded in substances. That

[1] It is because Locke has the same abstract notion of the substrate as a something-he-knows-not-what that he finds it possible to suggest that after all God might have "superadded to matter a faculty of thinking" (*Essay Concerning Human understanding*, IV iii 6) The *Nyāya-sūtra* therefore argues from the *specific* nature of psychical qualities to a *specific* substrate, soul See *NS* III ii 58 ff

[2] *kenacid arthena liṅgasya sāmānyāt* "from the likeness of the Mark to something". But *sāmānyāt* should perhaps be translated 'from the Mark's community of nature with something else' For desire, etc, are not merely *like* qualities They *are* qualities Yet they are qualities of so unique a kind that, to use Praśastapāda's enlightening phrase, we may say there is *atyantajātibheda*, complete difference of kind, between them and those *physical* qualities on the relation of which to (physical) substance the inference is grounded

[1a] *NBh* p. 19 l 6 (on *NS* I. i. 5).

which is the ground of these qualities of desire and the like, is the Soul".

The fifth aphorism of the *Nyāya-sūtra* substitutes a threefold division of inference for the twofold division which we have just been considering: and the meaning of the terms which it uses—*pūrvavat*, *śeṣavat*, and *sāmānyato dṛṣṭa* was already obscure to Vātsyāyana, who gives alternative explanations of them[1]. If conjecture is permissible, it may be suggested that *sāmānyato dṛṣṭa* meant for the *sūtra-kāra* just what it meant in the *Vaiśeṣika-sūtra*; and that his innovation consisted in further subdividing the other class of inference, *dṛṣṭa-liṅga*, into two heads, *pūrvavat* and *śesavat*. As references are made in the *Sūtra* itself[2] to inference by elimination or residues or disjunction—*pariśeṣānumāna*—it is possible that *śeṣavat* has this meaning: and this is one of *Vātsyāyana's* alternative explanations. In that case we may

[1]Keith *ILA* p 90 considers that *NS* II i 37—8 must be regarded as giving three instances of inference corresponding to the three types of inference enumerated in *NS* I i 5 If this be so, two of the three illustrations of inference which Vātsyāyana reads into the somewhat cryptic utterance of the *Sūtrakāra* do not correspond with the illustrations of the three types which he has given at I i 5 and it is not easy to bring what he says here into line with what he said there The three instances here given are (1) the inference that it *has* rained from the flooded river, (2) the inference that it *will* rain from the ants running about with their eggs, (3) the inference that there is a peacock in the jungle, from the peacock-like scream (Keith follows later commentators interpreting this last as inference of the coming of rain from the peacocks' cries) If the last is intended as a case of *sāmānyato dṛṣṭa*, then the meaning of this phrase has lost its distinctiveness it would mean simply inference from resemblance.

The third example of *sāmānyato dṛṣṭa* given by Gauḍapāda in his comment on the *Sāṁkhya Kārikā* has a similar want of distinctiveness, viz. the inference that because the mango-trees are in bloom here, they must be in bloom elsewhere

[2]*NS* III ii 40—*pariśeṣād yathoktahetūpapatteś ca* Vātsyāyana on this cites the same formula or *vākya* which he cited on I i 5 to explain *śesavat* —

'*prasaktapratiṣedhe anyatrāprasaṅgāc chiṣyamāṇe sampratyayaḥ*"—

"if you deny various possibilities, and there is no possibility anywhere else, you must come in conclusion to the remaining possibility"

We have proved that consciousness cannot belong to the five material elements nor to *manas*: there is no other substance except *ātman*, soul: therefore it must belong to soul

accept as the original meaning of *pūrvavat* Vātsyāyana's explanation: *yathāpūrvaṁ pratyakṣabhūtayor anyatara darśanenā'nyatarasyā' pratyakṣasyā' numānaṁ, yathā dhūmena'gniḥ*. "*Pūrvavat* inference is where, of two perceptible objects such as have been before experienced, the sight of one leads to the inference of the other which is not perceived; as fire is inferred through smoke" That is to say, *pūrvavat* inference comprises normal inferences of every kind (*dṛṣṭa-liṅga*); setting aside eliminative inferences which the *sūtra-kāra* has found it necessary to treat as a class apart, thereby innovating on the *Vaiśeṣika-sūtra*, which either had not noted these or had not regarded them as embodying any distinct principle. For all practical purposes the *śeṣavat* form is disregarded by the *Naiyāyika* himself.

The alternative explanations which Vātsyāyana offers of the three terms are that *pūrvavat* is inference from what preceded, that is from cause to effect, as when we infer that there will be rain, from clouds; *śeṣavat* is inference from what followed, that is from effect to cause, as when we infer that it has rained, from the swollen river · *sāmānyato dṛṣṭa* is as when we infer that the sun moves though we have never seen it moving, on the ground that when we see something in one place which we saw previously in another place there has always been movement preceding'.

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[1]This is not further explained by Vātsyāyana, but he is quite well aware that it is different from the inference to the existence of the soul from psychical qualities And, as has been said above p 151, he gives the letter as an illustration of a *different* explanation of *sāmānyato dṛṣṭa*, which he analyses carefully.

The present explanation of *sāmānyato dṛṣṭa* agrees with Śabara's, and with Praśastapāda's, and is a natural development from the older view as found in the *Vaiśeṣika-sūtra* For a further account of it see the following paragraphs, pp 158-159

The difference between the two views may be expressed by saying that the *adṛṣṭa-liṅga* of the *Vaiśeṣika-sūtra* is an inference about an unknown minor—*apratyakṣe liṅgaliṅginoḥ sambandhe* while the *sāmānyato-dṛṣṭa* of Śabara and Praśastapāda is an inference to a relatively novel major.

Praśastapāda supplements the doctrines of the *Vaiśeṣika* by those of the *Nyāya*, and develops new logical conceptions in his interpretations of both his sources. He accepts from the *Nyāya* the doctrine of the example, and develops it into a canon of inference, as will be shown later. He supplements the *Vaiśeṣika* notion of the *liṅga*, and of the real relations which provide the basis of inference, by taking over the *Naiyāyika* notion of probativeness; and he attempts to make this notion more definite by conceiving all inference to rest on *avinābhāva*, or inseparable connection of characters. And in the light of this doctrine of inseparable connection he fixes the formula for a 'major premise', which really usurps the function of the *Naiyāyika's udāharana* or statement of probativeness derived from likeness to examples. The rest of the section deals with Praśastapāda's statements relative to the process of inference, the relation through which the inferential mark functions, and the two kinds of inference.

(i) The process or 'instrument' of inference

PBh p.205 l 10. " The formula (*vidhi*) is 'Where there is smoke, there there is fire · and in the absence of fire smoke also does not occur'. In the case of a person who knows the connection in this way (*prasiddhasamayasya*), the conviction of fire arises, as the result of an undoubted experience of smoke and as the result of remembering the accompaniment of smoke by fire (*sāhacaryānusmaraṇāt*)".

The phrase *prasiddhasamayasya* is explained by Srīdhara as *prasiddhāvinābhāvasya*. It has been argued by Stcherbatsky that this is borrowed from Dinnāga by Praśastapāda, who has concealed or attempted to conceal his obligation by altering the phrasing[1]. Diṅnāga's

[1] *Le Muséon NS* vol v 1904 " *Comme toujours Praśastapāda a masqué son emprunt en changeant les termes* " (p 140 footnote) Keith *ILA* p 105

definition, as quoted by Uddyotakara[1] is *nāntarīyakārthadarśanaṁ tadvido 'numānam*,—" experience of a thing as inseparably connected is the instrument of inference, for a person who knows this inseparable connection ".—But the argument that Praśastapāda borrowed his *prasiddhasamayasya* from Diṅnāga's *tadvidaḥ* would prove too much. For a precisely parallel phrase occurs in the definition of inference given in Śabara's *Bhāṣya*[2]—*anumānaṁ jñātasambandhasya ekadeśadarśanād ekadeśāntare 'saṁnikṛṣṭe' rthe buddhiḥ*. And it would not be suggested that Śabara, or the *vṛttikāra* from whom he appears to be quoting here, is concealing his borrowing of Diṅnāga's *tadvidaḥ* by changing the phrase into *jñātasambandhasya*. It seems to have been common to the logic of the time to insert into the definition of the instrument of inference a proviso that the person drawing the inference should be aware of the relation between the terms which makes the inference possible.

The experience of smoke must be undoubted, because if you are not sure whether what you now see is smoke or mist your 'Mark' will be a fallacy of the variety designated by Praśastapāda '*tadbhāvāsiddha*' NK *ad loc.*, p.206 l.11

Śrīdhara points out that the instrument of the inferential conclusion is according to this passage the experience of the smoke (the middle term) together with the memory of the universal connection (*vyāpti*). This he says leaves no room for the *liṅgaparāmarśa* (in the form *vahnivyāpyadhumavān ayaṁ parvataḥ*—in this hill there is smoke-pervaded-by-fire)—which according to the teaching of Uddyotakara is the instrument of the inferential conclusion : and the statement of which is assigned as the special function of the *upanaya* or fourth member of

[1]*NV* p 56 l. 14 Vācaspati *ad loc* (*NVT* p 120 l. 8) does not attribute this to Diṅnāga but the attribution is implied at p. 127 l. 1 and again l 12 See Diṅnāga, Fragment G.

[2]p 10 l 11 in the *Bibl. Ind* edition, 1889

the syllogism, as distinguished from the statement of the *liṅga* as a property of the *pakṣa* which is commonly assigned as the function of the second member of the syllogism (*pakṣadharmatā*).—Srīdhara says that the *Vaiśeṣika* has no use for this '*dvitīyaliṅgaparāmarśa*'[1]; since the conclusion is made possible *liṅgadarśanavyāptismaraṇābhyām eva*—simply through seeing the Mark and remembering the connection. He adds that the *upanaya* or fourth member of the syllogism does not become functionless on this account: for this member is put forward, in 'inference for another', for the purpose of conveying *pakṣadharmatā*—the residence of M in S—which has not been conveyed by the other members (*avayavāntarair apratipāditasya pakṣadharmatvasya pratipādanārtham parārthānumāne tasyopanyāsāt*. *NK* p 206 l. 15)[2].—For, on the *Vaiśeṣika* view, the function of the *apadeśa* or second member is the bare statement of the *liṅga*, and not the assertion that it belongs to the subject (*pakṣadharmatā*)[3]

(*ii*) *The relation on which inference is grounded*

PBh p.205 l.14. "Thus the Mark is something inseparably connected with something else in every time and place (*sarvatra deśakālāvinābhūtam itarasya liṅgam*). The mention of the causal relation and other relations as grounds of inference in the *Vaiśeṣika Sūtra* (IX.ii.1) is by way of illustration and is not meant as an exhaustive statement of the grounds of inference (*nidarśanārtham kṛtaṁ nāvadhāraṇārtham*): for we find other relations besides those mentioned (used as grounds of inference). Thus when we hear the officiating priest

[1]It is usually called *tṛtīyaṁ liṅgajñānam*,—the first being the previous experiences of the 'Mark' which lead to apprehension of the universal connexion (*vyāpti*), the second being the *pakṣadharmatājñāna* and the third the *liṅgaparāmarśa*. See *Tarkabhāṣā* p. 42 (Pandit Reprint)

[2]On the interpretation of this passage, see below, pp 170—172

[3]See the *Tarkabhāṣā* p 36 ff. The *Nyāyapradīpa* comment p 36 states the views of the *Vārtikakāra*, of the *Tattvacintāmaṇi*, and cf *Udayana* and on p 42 refers to the present passage of the *Nyāyakandalī*.

repeating the sacrificial formula we infer the presence of a sacrificing priest, who is concealed from view : the rising of the moon is the inferential Mark from which we infer the rise of the sea and the blooming of the lotus : and calm waters in the autumn are the Mark of the rising of the star Canopus[1].

"All such cases are comprehended in the words '*asyedam*', 'this is related to that', of *sūtra* IX.ii.1, for these words refer to relation in general (not to this or that particular type of relation such as causality or identity)". *asyedam kāryaṁ kāraṇaṁ saṁyogi virodhi samavāyi ceti laiṅgikam.* Praśastapāda would interpret this : "Inferential knowledge arises where 'this is related to that'—as effect, cause, conjoined, opposite, constitutive or inherent, *etc*" The view of the *sūtra* against which he is arguing interprets it as meaning that the grounds of inference can be reduced to a limited number of real relations. Now this corresponds with the view which Dinnāga and subsequent *Bauddha* logicians took of inference, except that they reduced the real positive relations, on which they supposed all inference to be grounded (apart from inference from non-perception, *anupalabdhi*), to the two real relations of causality and identity (*kāryakāraṇabhāva* and *tādātmya*), in place of the rather incoherent list given in the *Vaiśeṣika Sūtra*. Praśastapāda's argument here is therefore rightly connected by Śrīdhara with the controversy between the *Bauddhas* and the orthodox school as to the real nature of inseparable connection (*avinābhāva*) and the means by which we arrive at knowledge of it (*vyāptigrahopaya*, to use the phrase of a

[1] Praśastapāda's illustrations are not all favourable to his point, for it is easy to read the causal relation into some of them Later logic manuals give the illustration of inferring colour or form from taste—presumably as when tasting a fruit in the dark TB comm p 38—*tādātmyatadutpattibhyām evāvinābhāva iti saugatamatam tan na rasādinā rūpādyanumānasya sakalajanasiddhatvāt. na hy anayoḥ kāryakāraṇabhāvo na va tādātmyam iti.*

later period)[1]. But there is nothing to show that Praśastapāda had in view the doctrine as taught by Dinnāga. He does not mention Dinnāga's twofold classification of relations.

(*iii*) *The two types of inference—dṛṣṭa and sāmānyato dṛṣṭa*

PBh. p.205 l.19. "The inferential mark is of two kinds: that which is directly experienced, and that which is experienced from likeness (*dṛṣṭaṁ, sāmānyato dṛṣṭaṁ ca*). Where there is complete identity of kind between the property as known in the example, and the property as it is to be proved (*prasiddhasādhyayoḥ*)[2], the inference (*anumāna*) is of the former kind (*dṛṣṭa*); for instance, from the experience of just a dewlap (*sāsnāmātra*) in nothing but a cow (*gavy eva*), we infer in another place also that a creature is a cow from seeing just a dewlap[3].

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[1]Śrīdhara has a long egression on this controversy, *NK* pp 206—210. The passage is translated by Faddegon, pp. 458—465 See also *Sarvadarśanasaṁgraha*, chapter on the *Bauddhas*, first page Both Śrīdhara and Mādhavācārya take as the text for the discussion the often-cited couplet from Dharmakīrti:—

kāryakāraṇabhāvād vā svabhāvād vā niyāmakāt avinābhāvaniyamo 'darśanān na na darśanāt.

[2]Keith *ILA* p 95 footnote 2 "Jacobi (*NGWG* 1901 p 481) and Suali (*Intr*, p 417) render *prasiddhasādhyayoḥ* as referring to the subject and the example, but this is contrary to the analogy of *sāmānyato dṛṣṭa* in the *Nyāya* cf *apratyakṣe liṅgaliṅginoḥ sambandhe* *NBh* p 14" Keith renders "when the middle term and the conclusion are not heterogeneous". But the context here shows that Jacobi and Suali are right The phrase of the *Nyāyabhāṣya* is used in connection with a different interpretation of *sāmānyato dṛṣṭa* Śrīdhara explains: *prasiddhaṁ yat pūrvaṁ liṅgena saha dṛṣṭam, sādhyam yat sampraty anumeyam* i e *prasiddha*=P as experienced in XP, the example *sādhya*=P as to be proved in SP, the *pakṣa*.

[3]The cow-hood which is to be proved (*sādhya*) is precisely similar to the cow-hood as experienced in the cows which constitute the example or *sapakṣa* (*prasiddha*). As Śrīdhara puts it: *gotvajātiviśiṣṭāyām eva govyaktau sāsnopalabdhyā sampraty api gotvajātiviśiṣṭāyām eva govyakter anumānam.* (*NK* p. 212 l. 7).—The example is that given of the *dṛṣṭa liṅga* in *VS* II. 1. 8.

P. 206 l.l. "Where there is complete difference in kind between the property as experienced and the property to be proved, the inference is from concomitance of the general nature of the property to be inferred with the general nature of the inferential mark (*liṅgānumeyadharmasāmānyānuvṛttito 'numānam*)[1] · and this is *sāmānyato dṛṣṭam*.

"For example, finding from experience that the activity of farmers, merchants, and officials has a result (*phalavattva*), we infer that the activity of hermits has a result too, although we cannot point to the motive as something that has actually fallen within our experience (*dṛṣṭam prayojanam anuddiśya*) "

The distinguishing character of the *sāmānyato dṛṣṭa* argument given by Praśastapāda is that we are arguing from *one sort* of activity which we have experienced to *another sort* of activity of which we have no experience. In the *dṛṣṭānumāna* on the other hand we are arguing from one *cow* to another *cow*, i.e. from one thing to another thing *of exactly the same sort*. We have never experienced the motives of hermits' activities · but we have experience of the motives of worldly men's activities and we extend the connection between activity and motive which has been experienced in one class to other sorts of activity, in which such connection has not been experienced. The *sāmānyato dṛṣṭa* inference is much more constructive or productive, much less purely reproductive or repetitive, than the *dṛṣṭa* inference. The former is an inference to the relatively novel, while the latter deals merely with repetitions of the old. The *sāmānyato dṛṣṭa* looks less cogent in form, but is more like real and valuable inference in fact.

[1]The meaning is that the *particular* form in which the P has been experienced (*prasiddha*) is different from the *particular* form in which P is to be proved (*sādhya*) P in the *latter form* has never been experienced with M

P. Bh. p. 206. "This is inference for oneself (*svaniścitārtham anumānam*)."[1]

The distinction between inference as a thought-process in one's own mind, and that process expressed in words for communication to others, is an obvious one, and is already contained in Vātsyāyana's distinction between *anumāna* on the one hand, and *nyāya* or *sādhaka-vākya* or *pañcāvayavopapannavākya* on the other hand. But in defining the *avayavas*, or Members of the *vākya*, the *Sūtrakāra* does not keep the two things distinct, his definitions being sometimes rather definitions of aspects of the inferential process (premises in ' inference for oneself'), than definitions of those *propositions* (verbal expressions of premises) which alone can form part of a *vākya*, a probative *statement*. This, as we learn from Uddyotakara and Vācaspati Miśra, exposed him to the criticism of Vasubandhu.[2] and these criticisms would perhaps draw attention to the necessity of making more explicit than Vātsyāyana had done the distinction between inference in itself and the expression of it in words. It does not seem, in the light of these considerations, that there can be any question of priority

[1]Keith *ILA* pp 106-7 " Yet a further proof of the dependence of Praśastapāda on Dinnaga may be derived from the fact that the distinction of reasoning for oneself and reasoning for another is present in Diṅnāga, and is expressly stated (*NBT* pp 46-7) to have been introduced by him . . Praśastapāda's debt to Diṅnāga in this regard is clear, despite his slight change in terminology (*svaniścitārtha for svārtha*), which may legitimately be attributed to a desire to conceal his borrowing, for he retains in practice, if not in theory, verbal testimony as a separate means of proof, while adopting the principle of distinction between reasoning for oneself and reasoning for another, which in truth rests on the fact that verbal testimony is no true means of proof at all " (I find no such statement in *NBT* pp 46-7. The reference is perhaps wrong)

I have deliberately rendered *svaniścitārtham* in what seems to me a wrong way here, making it identical in meaning with *svārtha*. But it should probably be " inference in which the object or conclusion is established (inferred) by oneself ".

[2]*NV* p 139 l. 14 The criticism is *etasmin avayavatraye evaṁlakṣaṇenopapādite teṣāṁ trayo durvibhāvāḥ*. *NVT ad loc* p 203 (last two lines) says . *atra Subandhunā pratijñādayas trayo ' vayavā durvihitā Akṣapādalakṣaṇenety uktam* See *Fragments from Dinnāga*, section 13

of discovery as between Praśastapāda and Diṅnāga. Nor is it clear that there is any connection between the recognition of the distinction between *svārthānumāna* and *parārthānumāna*, and the denial of the claim of verbal testimony to be a separate source of knowledge[1]. It was inevitable that all schools should draw the distinction between inference in the mind and inference expressed in words,—whether or not they admitted Testimony as a *pramāṇa* or instrument of valid cognition.

SECTION 2 THE 'NYĀYA', OR DEMONSTRATIVE METHOD

The formulation of the five-membered statement[2] is apparently the achievement from which the *Nyāya* system took its name The word *nyāya* meant 'method'; and the five-membered statement became *the* method for the *Naiyāyika—paramo nyāyaḥ*, as Vātsyāyana calls it in the brief account of it given in his comment on the opening *sūtra*[3]. Other '*nyāyas*', or methods of debate and argument, had been prevalent in earlier schools, and Vātsyāyana himself[4] speaks of certain *naiyāyika's* or teachers of method—for it is a mistake to take the term here in its later sense of teachers of the *Nyāya* system—who reckon ten members in the 'statement' by including, as parts of the method, the desire to know, the doubt, the belief in the possibility of a solution[5], the purpose, and the dispelling of the doubts. The second and the fourth of these are enumerated among the topics or 'cate-

[1]Keith, *ILA*, pp 107-108

[2]Vidyābhūṣaṇa points out that Nārada is described in the *Mahābhārata* (*sabhāparvan*, 5 l. 5) as one who understood the characters which make the statement endowed with five members valid, and the characters which make it invalid—*pañcāvayavayuktasya vākyasya guṇadoṣavit*. *HIL* p 498 This is certainly a reference to the '*nyāya*' as formulated in the *Nyāya Sūtra*.

[3]*NBh* p. 5 l. 5

[4]*NBh* p 39 l 9 *daśāvayavān eke naiyāyikā vākye saṁcakṣate, jijñāsā saṁśayaḥ śakyaprāptiḥ prayojanam saṁśayavyudāsa iti*

[5]So Keith renders the doubtful term *śakyaprāpti*, *ILA* p. 86 Jhā (*transl*, I. 316) renders 'capacity to accomplish what is desired',

gories' of the *Nyāya Sūtra*, but not as '*avayava's*' or members of the 'statement'[1]. These five additional 'members' are certainly phases in the psychological process of reasoning; but they have no place in a logical analysis of argument: and Vātsyāyana, in rejecting[2] them on the ground that they are not organic parts (*ekadeśa*, *bhāga*, *aṅga*) of the probative statement (*sādhakavākya*) as not being instruments in proving the thing[3] (*asādhanam arthasya*), is recognising the distinction which we should make between the properly logical and the merely psychological factors in the reasoning process.

It seems clear that the lopping off, on this principle, of the superfluous or non-logical members of the '*nyāya*' was in fact a very important achievement. It marks the transition from a pre-logical to a truly logical stage of reflection upon the process of reasoning, and fairly entitles the school which took this step to be regarded as the founders of the syllogistic art in India. The earlier '*nyāya*' was a stereotyped formula for the conduct of debate and cannot claim the name of syllogism. It was a methodised debate rather than a formulation of the process of reasoning: and the 'logic' of the period was not logic at all, but a conventional methodology of discussion. This is clear from an examination of the arguments in such works as the *Kathāvatthu*, or from a consideration of the ten-membered 'syllogism' of the early *Jaina* logic as set out by Bhadrabāhu[4].

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[1]*Saṁśaya* figures also in the lists of the '*tantrayukti's*'. The sixteen 'categories' of the *Nyāya* are no more than the '*tantrayukti's*' of that system.

[2]*NBh* on *NS* I i 32.

[3]In many contexts (as here) *artha* can be rendered 'conclusion'. Cf. *svaniścitārtham anumānam* = an inference in which the conclusion is inferred by oneself.

[4]Vidyābhūṣaṇa *HIL* p. 166 = *MSIL* pp 6—8. The ten-membered syllogism spoken of by Vātsyāyana is quite different from this.

The *Kathāvatthu* uses certain technical terms such as *niggaha*, *paṭiññā*, *upanaya*, *niggamana*, *opamma*: but not as the *Nyāya* does.

The '*nyāya*' in its origin, was not a 'syllogism'; but it became such as soon as it came to be regarded as the verbal expression of an inference, as Praśastapāda and Diṅnāga regarded it. According to these writers and all the later schools, the *nyāya* was simply the regular expression, for the information of another (*parārtha*), of an inference which one has drawn for oneself (*svārtha-*, or *svaniścitārtha-*, *anumāna*). And it is at this stage that the question begins to arise, why should inference for another have five members? It seemed obvious that 'inference for oneself' implied in addition to the conclusion only *two* factors, corresponding to the two premises[1] of the Aristotelian syllogism. What factors in inference are expressed by the other two members[2] in the *nyāya*?

Either the *hetu* or the *upanaya*, on the one hand, and either the *pratijñā* or the *nigamana* on the other hand, would seem to have nothing to express.

The reason why the so-called Indian syllogism. the *pañcāvayava-vākya*, had five members, is partly to be found in its history. The earlier *nyāya's* were not syllogisms, nor even *pararthānumana*, i.e., communication of inference to another. They were conventional forms of debate, and the number of the 'members' depended on the convention of a particular school: there was no logical reason why the number should be ten in the earlier methodology. and perhaps it was not a purely logical reason which gave the *nyāya* five members in the *Nyāya Sūtra*,—rather than three. The two additional members may well have been a legacy from the earlier

[1] *liṅgadarśana* or *pakṣadharmatā*, and *vyāptismarana*. But Uddyotakara, followed by the later school, adds *parāmarśa*, i.e. the realisation that S is M-which-is-P, as a sort of third premise, expressive of the unity of the other two factors, and immediately causing the inferential knowledge that S is P Thus a function is found for the *upanaya*, as the expression of this *parāmarśa*.

[2] See section 3 *infra* pp 167 ff for the Indian syllogism and its members.

methodology. It is noteworthy that the author of the *Nyāya Sūtra* does not connect his doctrine of the 'members' with the topic of inference; and Vātsyāyana makes it plain in several passages that he conceived 'the method' or the five-membered statement as *something more* than, though inclusive of, inference. Thus, in identifying *nyāyavidyā or nyāyaśāstra* with the *ānvīkṣikī* of the earlier literature, he asks: "What is this *nyāya*? *Nyāya* is the enquiry into things by the instruments of valid cognition (*pramāṇair arthaparīkṣaṇaṁ nyāyaḥ*). This enquiry or *anvīkṣā* consists in *inference* relying on *perception* and *testimony*. it is the *subsequent investigation* (*anvīkṣaṇam*) into something apprehended (*īkṣitasya*) by perception and testimony. and the science which works with this *anvīkṣā* is *ānvīkṣikī* that is to say it is *nyāyavidyā* or *nyāśāstra*—the science or art of logical method[1]" At a later point in the comment on this same *sūtra*[2] he attempts to identify each of the four members of the *pañcāvayavavākya* (excluding of course the conclusion) with one or other of the four recognised instruments of cognition, asserting that "the Proposition is testimony, the Reason is inference, the Example is perception, the Application is analogy. The Conclusion sets forth the competency or cogency of all of these acting unitedly on a single object. This is the prime method, the '*paramanyāya*' ".—He speaks to precisely the same effect in another passage[3] "In

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[1]*NBh*. p 8 ll 14—17 He adds · *yat punar anumānaṁ pratyakṣāgamaviruddhaṁ, nyāyābhāsaḥ sa.*

[2]*NBh* p. 5 ll 1 to 5 *teṣu* (*sc avayaveṣu*) *pramānasamavāya āgamaḥ pratijñā, hetur anumānam, udāharanam pratyakṣam, upanayanam upamānam sarveṣām ekārthasamavāye sāmarthyapradarśanam nigamanam iti so 'yaṁ paramo nyāya iti.* (There should be a stop after *pramāṇasamavāyaḥ*, and no *saṁdhi*)

[3]*NBh*. p 44 ll 10—16. on *NS* I i 39 Dr. Jhā's translation of this passage is misleading He takes *sambhavas tāvat śabdaviṣayā pratijñā* as one clause—" in the inference bearing on sound the Proposition 'sound is non-eternal' comes under 'Probability' " This is impossible, seeing that the *Naiyāyika* did not admit *sambhava* to be a *pramāṇa*.

the statement which is the aggregate of the members (i.e. in the *pañcāvayavavākya*) the various instruments of cognition co-operate (*sambhūya*) to establish the thing, as the result of their mutual interconnection. The co-operation (*sambhava*) is as follows. The Proposition has a subject-matter which belongs to *credible testimony* (*śabdaviṣayā pratijñā*). Owing to the fact that such testimony is (sometimes) opposed by perception and inference, and because the statement of anyone but an inspired seer cannot stand alone (as valid independently and in its own right), there is *inference*, in the form of the Reason, as the result of seeing similarity (to the present case) in an example. . . The Example has a subject-matter which belongs to *perception* (*pratyakṣaviṣayam udāharaṇam*), since it is by something *seen* that what has not been seen is established (in the inference) The Application is *analogy*, since it applies (the example) in the form 'so is this' (*upamānam upanayaḥ, tathety upasaṁhārāt*). . ."

In these passages Vātsyāyana clearly treats the five-membered statement as a method (*nyāya*) through which all four instruments of knowledge are brought to bear on a single object. And he clearly thinks of it as *more* than inference or the expression in words of inference: for the inferential element is identified with only one member, the *hetu* or reason.—But inference cannot be abstracted from perception, at least; and this fact is recognised in the *sūtrakāra's* definition of inference as *tatpūrvaka*, dependent on perception. And since the perception which it implies can hardly be confined to the present case (SM), this really implies recognition of similarity to previous examples (*dṛṣṭānta* XM)— and thus 'analogy' is also implied. Therefore, except for the element of testimony which Vātsyāyana reads into the Proposition (an indefensible position, unless we are prepared to treat the '*nyāya*' as a method which is

valid only when it confirms that for which we already have authoritative testimony), an analysis of what is implied in inference, *anumāna*, would have led to some such formulation of inference as the '*nyāya*' which Vātsyāyana here treats as something *more* than inference. Whatever then may have been the intention of the *sūtrakāra*, it was inevitable that the five-membered statement should be regarded as 'syllogism', i.e. as the formulation of *anumāna*. It is in fact in many ways an admirable formulation of that class of inference which is based on a previous induction[1]. But the five-membered formula was influenced by its historical origin in a '*nyāya*' which was methodological rather than logical, and its structure must be regarded as in part vestigial, rather than determined by the requirements of logical analysis[2]. Western logic might be inclined to formulate the argument from examples thus:—

1. X (the example) is M. Y (the negative example) is non-M.
2. X (the example) is P. Y (the negative example) is non-P.
3. Therefore M is necessarily P.
4. But S is M.
5. Therefore S is P.

This 'deduction combined with superficial induction[3]', happens to have five members; but *they are not the five members of the Indian 'syllogism'*; which combines the first three clauses of the above formula into a

[1]See *Note on the Indian Syllogism*, in *Mind*, *NS* Vol. XXXIII, No. 132

[2]Caraka seems to be thinking of inference in the way in which these passages of the *Nyāyabhāṣya* think of the '*nyāya*', when he says that *anumāna is dṛṣṭānto hetubhir yuktaḥ* For he uses *hetu* in the sense of *pramāṇa*. But his account is that of the layman, and should not be taken too seriously. *Carakasaṁhitā*, *vimānasthāna*, chap viii, p. 300.

[3]So Faddegon characterises the 'Indian Syllogism'. But the 'therefore' in the third statement here is entirely contrary to Indian conceptions which never treat 'induction' as an inference.

single member, namely, the 'Example' (*udāharana* or *nidarśana*), and therefore is still left with a superfluity of two members, viz., *either hetu or upanaya*, and *either pratijñā or nigamana*. This superfluity is inherited from the time when the '*nyāya*' was a method of debate and not yet a syllogism: and, in the case of the *Nyāya* school, the convention of five members may have been fixed (as is suggested by these passages of the *Nyāya Bhāṣya*) by a desire to equate the four 'premises' with the four *pramāṇas*.

SECTION 3 THE SYLLOGISM, AND ITS MEMBERS

Praśastapāda's account of the 'syllogism' (*parārthānumāna*) and its members is as follows.

Definition of parārthanumāna

PBh. pp. 231—252. "Inference for another is the communication, through the five-membered statement, of a thing ascertained for oneself. The communication is to persons who are in doubt or are of a contrary opinion or are ignorant; and is to be understood as taking place through the five-membered statement and in no other way (*eva*)[1].

The Five 'members'

(i) Proposition

"The Members, then, are the Proposition (*pratijñā*), the Reason (*apadeśa*), the Exemplification (*nidar-*

[1]The *evakāra* is meant, says Srīdhara, to exclude the views of those who teach a two-membered *vākya*, and those who teach a three-membered *vākya*.

His comment here embodies a long digression on the controversy between the *anvitābhidhānavāda and the abhihitānvayavāda*, which is translated by Faddegon pp. 492—494 See Jhā, *PSPM* p. 62, who cites Cowell's note on *SDS* (*transl.* p. 202).

śana), the Application (*anusaṁdhāna*), and the Conclusion (*pratyāmnāya*)[1].

"Among these, the Proposition is a setting forth of a *probandum*[2] which is not contradicted (by any instrument of knowledge). That is, it is the bare setting forth, with a view to communicating that to which the Reason applies, of a Subject as qualified by the Property the knowledge of which it is desired to convey (*pratipipādayiṣitadharmaviśiṣṭasya dharmiṇaḥ*). For example: 'Wind is a substance'. . [3].

(ii) *The Reason*

"The Reason is the mentioning of the Mark (or middle term, M.). That which accompanies the *probandum*[4] is found in its general nature (*sāmānyena*)[5] everywhere[6] in what is like the *probandum*, and is always absent (*asad eva*,—absent only, and never present[7]) in everything opposite to the *probandum*, is called a Mark . and the mentioning of this is the Reason[8]. For example, 'because of possession of movement"

[1]It seems best to give the renderings which have been used for the corresponding *Naiyāyika* terms—*pratijñā*, *hetu*, *udāharana*, *upanaya*, *nigamana*

[2]*anumeya*. It has the usual double meaning—neither S nor P, but SP This is clearly stated in the next clause—the *probandum* is the Subject, S, qualified by the Property, P : or the *sādhyadharmin* qualified by the *sādhyadharma*

[3]The rest of the paragraph deals with the Fallacious Propositions, and is translated below, p 216

[4]*anumeya*. Here the meaning is doubtful, but I think it stands for *sādhyadharmin*, S, rather than for *sādhyadharma*, P See below, pp 185 ff.

[5]The *particular* smoke on the hill is not present in the hearth : but smoke as such, *dhumatvena*,—in its universal nature—is present

[6]I cannot explain *sarvatra* 'everywhere' · the next clause states that M need *not* be found *everywhere* in XP, cases like S (*sapakṣa*)

[7]i e. in the *vipakṣa* X non-P.

[8]*apadeśa* The word, as it happens, is etymologically identical with the Greek *apodeixis* · and the *Vaiśeṣika* use of it has some resemblance to Aristotle's use. It figures in the lists of *tantrayukti's*, but in different senses. Kautilya understands by it merely 'citation'—*evam asāv āha ity apadeśaḥ*. Suśruta gives it a meaning closer to *Vaiśeṣika* usage · *anena kāraṇena ity apadeśaḥ*, *yathāpadiśyate madhureṇa na śleṣmā 'bhivardhate*—"*apadeśa* consists in assigning a cause, e.g 'by taking *madhura* the accumulation of phlegm is prevented'".

or 'because of possession of qualities' (wind is a substance). Here the Mark is present in the *probandum;* is found in what is like the *probandum*—'possession of qualities' being found in *everything* like the *probandum*, 'possession of movement' in *not-all* (i.e. *some*) things like the *probandum*[1]; and is—in both cases—always absent in that which is *not* substance. Therefore the mentioning of these is the Reason. . ."

(At this point occurs the long passage dealing with Fallacious Reasons, which is translated below, p. 199.)

(iii) *The Exemplification*

"The Exemplification is of two kinds, through likeness and through unlikeness. Of these, exemplification through likeness is the showing (*darśana*) of the fact that the Mark, in its general character[2], is constantly accompanied[3] by the *probandum*[4] in its general character (*anumeyasāmānyena lingasāmānyasyānuvidhānadarśanam*): for example, 'what possesses movement is seen[5] to be a substance, as an arrow' (*yat kriyāvat tad dravyaṁ dṛṣṭaṁ, yathā śarah*).

"And exemplification through unlikeness is the showing of the absence of the Mark where there is difference from the *probandum*: for example, 'what is non-substance does not possess movement,—as Being (*sattā*)'" . . .

(The next paragraph deals with Fallacious Exemplifications, and has been translated below, p. 220.)

[1]Thus both forms of valid syllogism are exemplified—*sapakṣaikadeśavṛtti* and *sapakṣavyāpaka* See below, p 188

[2]See note 5 above, p 168

[3]*anuvidhāna* means 'obedience', 'acting conformably to' Śrīdhara glosses by *sādhyasādhanayor anugamaḥ*

[4]*anumeya* here clearly stands for *sādhyadharma*, P

[5]The word *dṛṣṭa* is regularly used both by Vātsyāyana and Praśastapāda in the formulation of the *udāharana* or *nidarśana* Cf *dṛṣṭānta* and *nidarśana* The word seems to underline the appeal to experience,—as Vātsyāyana does when he says *pratyakṣaviṣayam udāharanam dṛṣṭenādṛṣṭasid dheh'*

(iv) The Application

"The Application (*anusaṁdhāna*) is the bringing to bear (*anvānayana*) on the Subject (*anumeya*)[1] of the Mark, in its general nature, as seen (*dṛṣṭa*)[2] together with the Property (*anumeya*), in its general nature, in the Example. That is to say[3], the Application is the statement through which is applied to the Subject the Mark, which has hitherto been mentioned *as a mere property of the Subject* (*anumeya dharmamātratvenābhihita*), so that its competency to prove the conclusion was before unapprehended,—but in its general character (i e. in its aspect as a universal or common character) is now seen in the Example *as accompanied by the Property to be proved* (*sādhyadharma*): 'and even so is wind possessed of movement' (*tathā ca vayuḥ kriyāvān iti*)."

NOTE.—Praśastapāda is trying to find for the fourth member of the syllogism a function distinct from that of the second, so as to justify its existence as a separate member. And his solution appears to be (though he does not yet use the term *parāmarśa*), that, whereas the Reason states that S is M (*pakṣdharmatā*, *dvitīyaliṅgajñāna*), the Application states that S is M-which-is-P (*parāmarśa tṛtiyaliṅgajñāna*).

Śrīdhara however gives a different explanation. He argues that the second member of the syllogism merely mentions the *hetu* or reason *in itself*, and does not state that it is a property of the subject—*hetuvacanaṁ hetusvarūpamātraṁ kathayati, na tasya pakṣadharmatām* The members of the five-membered statement are answers to the successive phases

[1]*anumeya* is here used in two different senses—first as P and then as S—in one and the same clause Similar cases of the ambiguous use of *sādhya* in a single clause could be quoted from Vātsyāyana

[2]See note 5 on preceding page.

[3]Praśastapāda has a habit of, so to say, commenting on his own utterances, which sometimes leads one to suspect that he is citing and commenting on an earlier '*vārtika*' Uddyotakara has this mannerism (if that is all it is) in an even more marked form, so that in e.g. Dr. Jhā's translation it will often be noticed that two consecutive sentences say exactly the same thing. Śrīdhara says *svoktaṁ vivṛṇoti*

of the hearer's 'desire to know' (*ākāṅkṣā, jijñāsā*). After the mention of the thing to be proved the hearer first desires to know what the instrument of proof is (*sādhane bhavaty ākāṅkṣā*): and this desire is satisfied by bare mention of the middle term. When the middle term or reason is known the hearer desires to know what constitutes it a middle term or reason, i.e. he desires to know its cogency or competency (*sāmarthyajijñāsā*): and this is satisfied by (a) the statement of inseparable concomitance (*avinābhāva*) in the third member; and then—in response to a further phase of the hearer's desire to know—by (b) a statement, in the fourth member, that S is M-which-is-P. The latter statement constitutes the *pakṣadharmatā*, according to Srīdhara: so that he denies the necessity of *pakṣadharmatā* in the usual sense (S is M), and identifies *pakṣadharmatā* with what Uddyotakara calls *parāmarśa*[1].

[1]This helps to explain a passage in Srīdhara's comment on *PBh* p 205 (*NK* p 206 ll 12 to 16) He says there that *in the case of inference for oneself* the only factors necessary to the inferential knowledge of P are the experience of M, and the remembrance of the necessary connection between S and P—*liṅgadarśanavyāptismaraṇābhyām evānumeyapratītyupapattiḥ* It is objected (1) that this leaves no room for the "*dvitīyaliṅgaparāmarśa*" without which the thought of P would not have reference to a particular time and place, because the thought of P (on this view) immediately follows on the act of remembrance The answer given is that the experience of the M determines P to a particular time and place (*na ca smṛtyanantara-bhāvitvād anumeyapratītir aniyatadigdeśā syāt, liṅgadarśanasya niyāmakatvāt*).

It is further objected (2) that if *parāmarśa* plays no part in inference for oneself, then the 'Application' or fourth member of the 'syllogism' will have nothing to express, and so will be without a function The answer given is that, *in the case of inference for another* the residence of M in S (*pakṣadharmatva*) has not been set forth by the other members, and that the application has the function of stating *pakṣadharmatva*

That is, in the case of *svārthānumāna* there is no need of a separate movement of thought corresponding to the statement that S is M-which is-P because the actual experience, *here and now*, of the M, determines the reference of M to the here-and-now S But in the case of *parārthānumāna*, M is not experienced here and now (i e in S), but barely *mentioned* in the second member Its application to S must therefore be definitely stated—and this is done in the fourth member but as stated now, in the fourth member, it is a statement, not merely that S is M, but that S is M-which-is-P

The obscurity of the passage is partly due to the phrase *dvitīyaliṅga-parāmarśa* In the later terminology *dvitīyaliṅgajñāna* is *pakṣadharmatā*, while the *parāmarśa* is called *tṛtīyaliṅgajñāna* Srīdhara (I think) refuses to make the distinction between *pakṣadharmatā* and *parāmarśa* so that the *dvitīya-* and *tṛtīya-jñāna* become identical for him.

Praśastapāda's statement that in the second member of the syllogism) "the competency of the reason to prove the conclusion is as yet unapprehended" is brought into line with this account by saying that this compentency consists in (a) positive and negative concomitance, and (b) '*pakṣadharmatā*'—the competency is then unapprehended in the second member because the two elements are stated subsequently in the third and fourth members

This account is perhaps rendered plausible only by the fact that in Sanskrit the second premise (the Reason) is stated in a single word, instead of in a clause as in English—the causal ablative of an abstract noun taking the place of a causal clause If we substitute for the word *kriyāvattvāt* the clause 'because it possesses movement', it becomes obvious that the 'bare mention of the middle term' is in fact impossible,—we cannot mention it without referring it to the Subject: that is to say the statement of the reason is necessarily at the same time a statement of '*pakṣadharmatā*', i e. a statement that S is M[1].—Śrīdhara's position is impossible simply because a member of the syllogism must be a proposition. He quotes, however the authority of the *Nyāyabhāṣya* in support of his account (*NBh* p. 44 l 17 *asati hetau kasya sādhanabhāvaḥ pradarśyate*[2]. *NK* p 250 l 23)

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[1]Śrīdhara has difficulty in explaining Praśastapāda's phrase *anumeyadharmamātratvenābhihita* (which clearly implies *pakṣadharmatā*) in such a way as to suit his own account "*Hetuvacanena lingam vastuvyāvṛttyānumeye 'sty etāvanmātratayā hetutvenābhihitam, na tu dharmini tasya sadbhāvaḥ kathitah*" "By the Statement of the Reason the mark has been mentioned as the reason only so far forth as it is in the *probandum* (P in general, nP) to the exclusion of any particular thing · its existence in the Subject is *not* asserted" (He does not mean that a *vyāpti* of P with M is asserted This is asserted in the *nidarśana*, not in the *apadeśa* He expressly says that the '*sādhanasya sāmarthyam*' can only be stated *after* the '*svarūpāvagati*').

[2]Vātsyāyana says that the Reason or Second Member is the assertion of the probativeness of the reason, i e the assertion that the reason is a reason (*sādhanatāvacanam hetuḥ*. *NBh* p 41 l 1 on *NS* I. i 34. See below p 279 for his further comment in *NBh* p. 45). This seems to ignore the function of asserting that S is M (*pakṣadharmatā*) later assigned to the second member. And accordingly he seems to assign this function—not however in the simple form of *pakṣadharmatā*, 'S is M', but in the elaborated form of *parāmarśa*, 'S is M-which-is-P',—to the Fourth Member or Appli-

Negative form of application

"And, after grasping the absence of this (i.e. of the Mark) where the Property is absent, we say—'and wind is not thus not-possessed-of-movement'"?

(*v*) *The Conclusion*

"The Conclusion'[1] is the re-assertion of the Proposition for the purpose of producing certitude in others about a Property which has been enunciated as the property to be proved but which was before (when first enunciated in the Proposition) uncertain[2]. That is

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cation, the function of which he declares to be 'the statement that the *probans* resides in the same *locus* with the *probandum*' (*sādhanabhūtasya dharmasya sādhyena dharmeṇa sāmānādhikaraṇyopapādanam upanayārthaḥ NBh* p 46 l 4)

It must be admitted however that the passage at p 41 presents difficulties The sentence *sādhye pratisaṁdhāya dharmam udāharaṇe ca pratisaṁdhāya tasya sādhanatāvacanam hetuḥ* ('the reason is the assertion of the probativeness of a property (M) after joining it with the subject (S) and the example') seems to imply an inversion of the order of premises the true order being given in the parallel passage at p 44 ll 16-17 *asati hetau kasya sādhanabhāvaḥ pradarśyata udāharaṇe, sādhye ca kasyopasaṁhāraḥ syāt?* 'Without the Statement of the Reason there would be nothing of which the probativeness is set forth in the example, nothing which is applied to the subject'. I suppose the explanation is that Vātsyāyana here realises that 'probativeness' *logically* presupposes that S is MP and that XP's are M although in the statement of the 'syllogism' these two premises are posterior to the statement of the reason

At p. 43 l 7 he says that the *hetu* also has two *forms* as well as the *udāharaṇa* and the *upanaya* (*dvaividhasya punar hetor dvaividhasya codāharaṇasyopasaṁhāradvaitam*) The *hetu*, stated simply in the word *utpattidharmakatvāt*, is *the same in form*, whether it be *sādharmyokta* or *vaidharmyokta*. But in its *usage* it is twofold, as similar to or different from the example (cf. *NBh* p 46 l. 2 *udāharaṇena sāmānasya viparītasya vā . . . sādhakabhāvavacanam hetuḥ*) The latter case corresponds to an Aristotelian syllogism in which the minor is of the opposite 'quality' to the major premise—(see *Note on the Indian Syllogism*, p 898 footnote 3)

[1]*Pratyāmnāya* The verb *pratyāmnā*—has the meaning of reciting or repeating after some one else (M-W) Śrīdhara's gloss is *sādhyadharmasya dharmiṇi pratyāmnāyaḥ. pratyāvṛttyābhidhānam yena vacanena kriyate tat pratyāmnāyaḥ*, i e it is the proposition in which we come back to the assertion of P as residing in S.

[2]*prathamam sādhyam abhihitam, na tu tan niścitam pratijñāmātreṇa, sādhyasiddher abhāvāt. Tasyopadarśite hetau, kathite ca hetoḥ sāmarthye, niścayaḥ pratyāmnāyena kriyate* (Śrī...dhara) The *pratijñā* is the Greek problēma, the *pratyāmnāya* is the *sumperasma* The Proposition reappears as a Conclusion after the Reason has been mentioned in the Second Member and after its cogency (*sāmarthya*) has been set forth in the Third and Fourth Members—*hetūdāharaṇopanayair hetos trairūpye darśite NK* p. 252 l. 12).

to say,[1] the Conclusion is the re-assertion of the Proposition for the purpose of producing through a completed syllogism (*parisamāptena vākyena*) certitude about what has been enunciated as the property of which knowledge is to be conveyed, but which was before uncertain, in the minds of others who have now, through the Statement of the Reason and through the other Members of the syllogism, grasped its cogency (*pareṣāṁ hetvādibhir āhitaśaktīnām*)[2]. The Conclusion is in the form 'Therefore it *must* be a substance' (*tasmād dravyam eva*). (It is an essential member of the syllogism) because, if it is absent, the other members—whether collectively or separately—do not convey its meaning (*tadarthavācakatvam nāsti*)[3].

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[1] *more suo*, he glosses his own words. See above, p 170 n 3.

[2] Śrīdhara glosses by *hetūdaharaṇopanayair avayavair hetos trairūpye darśite saṁjātānumeyapratipattisāmarthyānām.* But Praśastapāda may have meant by *śakti* the psychological tendencies or potencies produced by the premises—" who have now formed the mental dispositions necessary for the reception of the conclusion as a conclusion ".

[3] Each member has a separate meaning or force (*artha*) which it is its peculiar purpose or function (*artha*) to convey No member can perform another member's function. The function of each member terminates in the expression of its own meaning—*pratijñādayo 'vayavāḥ pratyekam svārthamātrena paryavasāyinaḥ* Without the Conclusion they cannot convey the unitary meaning which belongs to the syllogism as a whole But when the Conclusion is added, the various members, assisted by the felt incompleteness of the sense, and achieving a relation as of parts to a whole, become able to convey the unitary meaning—*asati pratyāmnāye naikam artham pratyāyitum īśate, svatantratvāt sati tv etasmin, ākāṅkṣopagṛhītaḥ angāngibhāvam upagacchantaḥ śaknuvanti.* (*NK* p. 252 ll 16—19).

The difficulty of assigning a separate function to the Conclusion, parallel to the functions assigned to the premises', comes out clearly in this discussion. For after all he has to admit that it *is* the premises which, in addition to their separate functions, somehow also achieve the function of conveying the unitary meaning. And he does not make it clear how the Conclusion helps them to *acquire* this, so to say additional, function Nor does the Conclusion seem to have any special function, since it is after all the *premises* that convey the 'unitary meaning'. (It is with this latter objection that Praśastapāda deals in the next sentence)

Vātsyāyana says · " *nigamana* has the force of *nigamyante anena* . that is to say, the four other members—Proposition, Reason, Exemplification, and Application—'*nigamyante anena ekatra*' 'are made thereby to come into one point'. *Nigamyante* means *samarthyante*, 'are made applicable or 'have their functions brought together': or else *sambadhyante*, 'are

" The objection that the Conclusion need not be stated because its purport is already conveyed by the premises proves too much : for on these grounds it might be held that only the Reason is to be stated after the Proposition, since people of understanding will grasp the purport of it from remembering the positive and negative concomitances (of the reason with the property to be proved). Therefore it is only with the Fifth Member or Conclusion that the meaning of the syllogism attains completion (*tasmād atraivārthaparisamāptiḥ*).[1]"

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brought into unity ' " In other words, the Conclusion is the expression of the unity of the premises (*NBh* p 44 ll 2-3) Later on, however, he has a phrase *viparītaprasaṅgapratiṣedhārthaṁ nigamanam* (p 45 l 5), which seems to be the germ of the *special* function later assigned to the Conclusion,—that of denying *satpratipakṣatva and bādhitaviṣayatva*.

[1]Śrīdhara represents the objector as holding that the aggregate of conditions which produce knowledge are the same in inference for another as in inference for oneself, the only difference being that in the latter this set of conditions is applied by oneself, while in the former it is communicated by another In both cases this set of conditions, viz , the Mark possessed of residence in the Subject and positive and negative concomitance with the Property (*pakṣadharmatānvayavyatirekopāpannam lingam*), leads to the inferential knowledge. What need then of stating the Conclusion?

He represents Praśastapāda as replying that it is the *cogency* of the Mark, and not the thing to be proved, that it communicated in the five-membered statement Now this cogency of the Mark does not consist merely in residence in the subject and in universality of concomitance proved by examples (*na tasya sāmarthyam bahirvyāptipakṣadharmatāmātram*) for even when these conditions are satisfied an inference may be neutralised by an equally cogent counter-inference (*satpratipakṣa*) or sublated (*bādhita*) by some other instrument of cognition The cogency of the Mark then implies further that it deals with a subject-matter which is neither ' neutralised nor ' sublated ' (*abādhitaviṣayatvam asatpratipakṣatvam api sāmarthyam*). The use of the Conclusion then is in declaring that the reason is competent to establish the Property because the assertion of its cogency has been made after the absence of neutralisation of sublation has been ascertained.

(This classical Naiyāyika teaching of the *pañcarūpopapanna hetu* is, I think, not to be found in Praśastapāda The artificiality of finding a function for the conclusion by assigning to it the business of asserting that in this case the conclusion *is* true, is obvious and the assertion can only be an *ipse dixit*—though Śrīdhara speaks of the conclusion as setting forth '*viparītapramāṇābhāvagrāhakam pramāṇam*'.)

As to the suggestion that the hearer may be left to supply one or more premises, Śrīdhara replies (1) that 'inference for another' is not addressed to the instructed, and (2) the form of the ' syllogism ' cannot be settled in accordance with the degree of understanding of the person addressed : for, on account of the difficulty of getting at other people's mental processes.

Praśastapāda's syllogism.—Collecting the illustrations of the various Members as given above we have the syllogism :—

Positive Form.	*Negative Form*
1. Wind is a substance. *dravyam vayuḥ*	
2. Because of the possession of movement. *kriyāvattvāt.*	
3. What is possessed of movement is found to be substance : as an arrow *Yat kriyāvat tad dravyam dṛṣṭam : yathā śarah.*	What is not substance is not possessed of movement : as Being. *Yad adravyam tat kriyāvan na bhavati . yathā sattā*
4. And even so is wind possessed of movement. *Tathā ca vāyuḥ kriyāvān.*	And not so is wind not-possessed-of-movement *Na ca tathā vayur niskriyah*
5. Therefore it must be a substance *Tasmād dravyam eva.*	

This formulation differs from that of Vātsyāyana in the statement of the positive and negative concomitances in the Exemplification with (as western logic would say) the order of the terms fixed and the subject distributed; so as to avoid (what western logic would call) an undistributed middle in the positive syllogism and an illicit process of the major in the negative syllogism. This

it is impossible to say that just so many premises will produce understanding while just so many will fail to produce it, in any particular case—*na ca pratipādyasya kiyaty ange pratipattir asti kiyati nāstīti śakyam avagantum, paracittavṛtter durunneyatvāt* (*NK* p 253 l. 10) He quotes a *śloka* from an unidentified source to the effect that the statement of inference must follow the nature of the thing, and not the nature of the persons to whom it is addressed. We should probably express the same thing by saying that the number of the premises is determined by logical and not by psychological reasons

'*vidhi*' or fixed formula for the Third Member is characteristic of the logic in which *avinābhāva* and the *trairūpya* were the leading conceptions. But these conceptions are foreign to Vātsyāyana's logic, and his Exemplification has not crystallised into a 'major premise.' He states his syllogism thus :—

Vātsyāyana's syllogism.

Positive Form	*Negative Form.*
1. Sound is transitory *anityaḥ śabdaḥ.*	
2. Because of having the character of being originated. *utpattidharmakatvāt.*	
3 Substances like pots which have the character of being originated are transitory. *utpattidharmakaṁ sthalyādi dravyam anityam.*	Substances like soul which have not the character of being originated are eternal. *anutpattidharmakam ātmādi dravyaṁ nityaṁ dṛṣṭam.*
4 And even so has sound the character of being originated. *tathā cotpattidharmakah śabdah*	And not so is sound a thing which has not the character of being originated. *na ca tathānutpattidharmakaḥ śabdah.*
5. Therefore, because of having the character of being originated, sound is transitory. *tasmād utpattidharmakatavād anityah śabdaḥ.*	

It has been suggested[1] with some plausibility that the *tathā*, 'so', of the Fourth Member was originally correlative to *yathā*, 'as', in the Third Member, and that the latter member was *in form* originally what it always remained *in name*, an Exemplification: the inference being formally an argument 'from particular to particular,' e.g.—

1. The hill is fiery,
2. Because it is smoky:
3. As the hearth is smoky and fiery,
4. So is the hill smoky, and
5. Therefore fiery.

This formulation of the syllogism is not however to be found in any logical work. But something like it is found in the curious interlude on logic which is inserted in Caraka's system[2] of medicine. The example[3] of syllogism there given is:—*nityaḥ puruṣa iti pratijñā; hetur akṛtakatvād iti; dṛṣṭāntaḥ akṛtakam ākāśam tac ca nityam; upanayo yathā cākṛtakam ākāśam tathā puruṣaḥ; nigamanaṁ tasmān nitya iti*.

Caraka's Syllogism.

1. Man is eternal:
2. Because he is not a product:
3. Ether is not a product, and it is eternal:
4. And, as ether is not a product, so man:
5. Therefore he is eternal.

Perhaps this gives us the explanation of the *ca* in the Fourth Member; which seems to have been a primitive part of the formulation of that member[4].

[1]Keith *ILA* p. 87 He says that the form of the Fourth Member was "originally presumably *tathāyam*"—instead of *tathā cāyam*. Both Vātsyāyana and Praśastapāda insert the *ca* in the Fourth Member · and in the Third Member Vātsyāyana does not use *yathā*, while Praśastapāda, though he has a *yathā*, does not use the *yathā* which would be correlative to *tathā*.

[2]*Carakasaṁhitā*, *vimānasthāna*, chapter viii (Calcutta 1877 p. 300).

[3]This is the '*sthāpanā*'. The *pratiṣṭhāpanā* proves that "man is transitory because he is an object of sense"—in precisely the same form.

[4]That is to say '*yathā*' was never an element in the *Third* Member. But it was always implied in the *fourth*

It has been said[1] that for Vātsyāyana inference was still really argument from analogy.—It is true that Vātsyāyana's logic is more primitive than Praśastapāda's. He never attempts to lay down ' Canons of Syllogism ' as a criterion by which a genuine reason is to be distinguished from a mere appearance of a reason : this was left for Praśastapāda or for some predecessor of Praśastapāda,[2] and it marks a very important development[3] in logical theory. But at the same time Vātsyāyana is emphatic in drawing the distinction between argument from *mere* similarity or difference, and argument from that sort of similarity or difference which alone, as *proving* the Property to be proved, can be called a ' reason ' (*hetu*). The function of the Reason as Member of the Syllogism is (he says) to state a relation of *probans* and *probandum* (*sādhyasādhanabhāva*) as subsisting between the Property to be proved (P) and a character (M) which the Subject (S) shares with the positive examples or in respect of which it differs from the negative example : while the function of the Exemplification (*udāharaṇa* or Third Member) is to show forth the *probans-probandum* relation as subsisting between the two qualities (M and P) in one instance[4]. The difference between sophistry and reasoning is just this, that the sophist opposes true reasonings by arguments based on arbitrarily chosen likenesses and differ-

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[1]Keith *ILA* p 27

[2]i e. the formulator of the *trairūpya*, whoever he may have been. It seems to me that the conception of the *trairūpya* is as important as the notion of ' universal connection ' (*avinābhāva*),—the ' discovery ' of which is sometimes represented as being the great achievement of Dinnāga or of Praśastapāda The *trairūpya* constitutes the Canons of Syllogism for Indian Logic. It would arise quite naturally out of the *Vaiśeṣika* doctrine of fallacies, which preceded it in the evolution of logical theory The ' *asat* ' and ' *anaikāntika* ' fallacies contain at any rate two of the Canons, by implication.

[3]I am not sure that it was a development in the right direction, however.

[4]*NBh p 45 l. 2 on NS I* *i* *39 udāharaṇena samānasya viparītasya vā sādhyasya dharmasya sādhakabhāvavacanam hetvarthaḥ dharmayoḥ sādhyasādhanabhāvapradarśanam ekatrodāharaṇārthaḥ*

ences without having established in his example the existence of such a relation of *probans-probandum* between the two properties (M and P)[1]: whereas a genuine reason is a property *probative* of what has to be proved (*sādhanabhūtadharma*) and not a mere similarity or a mere difference (*sādharmyamātra*, *vaidharmyamātra*). Indeed the leading motive of Vātsyāyana's logic might be said to be the assertion of the distinction between the true reason, as *probative*, and the sophistical reason (*jāti*) based on mere fortuitous similarity and difference[2]

SECTION 4. TRAIRUPYA AS THE CANON OF SYLLOGISM

Praśastapāda's Bhāṣya, page 200

Inferential knowledge is called *laiṅgikaṁ jñānam*, which, as the name implies, is the knowledge which arises from experience of a 'mark' (*liṅga*) which serves as the middle term or reason to establish the conclusion. The mark which brings about an inference (*lingam anumāpakam*) is characterised in the following verses cited by Praśastapāda :—

yad anumeyena sambaddhaṁ prasiddham ca tadanvite
tadabhāve ca nāsty eva, tal liṅgam anumāpakam
viparītam ato yat syād ekena dvitayena vā
viruddhāsiddhasaṁdigham aliṅgam Kāśyapo'bravīt.

[1] loc cit i 7 *avyavasthāpya khalu dharmayoḥ sādhyasādhanabhāvam udāharane jātivādī pratyavatiṣṭhate vyavasthite tu khalu dharmayoḥ sādhya-sādhanabhāve dṛṣṭānte gṛhyamāne sādhanabhūtasya dharmasya hetutveno-pādānam, na sādharmyamātrasya na vaidharmayamātrasya vā*

[2] The explanation of what might seem to be the disproportionate place assigned in the *sūtras* to the discussion of sophistical arguments (*jāti*. *NS* V i.—forty-three *sūtras*) is that the *Nyāya* is the assertion of logic against sophistical dialectic of the type which furnished the armoury of *śūnyavādins* like Nāgārjuna. Keith's remark (*ILA* p 24) that "Nāgārjuna's dialectic as sophistic was too much in harmony with the taste of Gautama not to attract his attention" is, I think, misleading. Gautama devotes so much space to the sophist, not because he was in sympathy with sophistry, but because he hated it,—and because it was at the time an urgent need to defeat the sophist How effective the *Naiyāyika's* attack was, is perhaps evidenced by the fact that the *śūnyavāda* gave place to the *vijñānavāda*, and that Buddhist logic adopted *Naiyāyika* principles.

" What is conjoined with the *probandum*, and has been found in what possesses the *probandum*, and is always absent in its absence, is the mark which brings about inference. What differs from this in one or in a pair of these respects is no ' mark ', being either contradictory, unreal, or doubtful. Thus said the son of Kaśyapa "

The 'son of Kaśyapa' is presumably intended to be Kaṇāda, the author of the *Vaiśeṣika Sūtra* · but there is no authority in the *Sūtra* for attributing to him the doctrine of the *Trairūpya*, or three characters of the valid middle term, which is expounded and attributed to him in these verses Nor is there any indication of the source from which Praśastapāda cites the verses

A similar doctrine is expounded by Dinnāga in the line from his *Pramāṇasamuccaya* cited by Uddyotakara and by Vācaspati Miśra[1]

anumeye 'tha tattulye sadbhāvo nāstita' sati.

"existence in the *probandum*, and in what is like the *probandum*, absence in what is not (like the *probandum*)" In the schools language of a later age[2] this becomes · *anumeye sattvam eva* : *sapaksa eva sattvam* · *asapakṣe cāsattvam eva*.—" The three characters of the mark (*trairūpyaṁ liṅgasya*) are existence *only* (never non-existence) in the Subject or thing denoted by the minor term; existence in things which resemble the Subject *only* (never in things which do not resemble the Subject. i.e. in '*vipakṣas*'), and *only* non-existence (never existence) in things which do not resemble the subject." The resemblance to the subject which is intended is of course resemblance to the Subject of the inference in respect

[1] *NV* p 58 l 2 *NVT* p 127 Vidyābhūṣana *HIL* p. 288.

[2] *Nyāyabindu* p 104 l. 3. *asapaksa* here takes the place of the usual *vipakṣa*. *anumeya* that of the usual term *pakṣa*.

of that which constitutes it the subject of inference—i.e. resemblance in respect of possessing the *anumeyadharma*, the major term, P. The meaning of the three conditions then is, according to the commentators :—

1. The mark or middle term must be present and never absent in the Subject of the inference, i.e the minor term.—*S must be M.*
2. The middle term must be found only in things known to have the property P.—
   Only XP's are M (not necessarily *all XP's*).
3. The middle term must be only absent (never present) in things in which the property P is known to be absent—
   All Xnon-P's must be non-M. i.e. No Xnon-P's may be M.

The difficulties which arise in connection with the formulation of the three canons by the help of the restrictive particle *eva*, ' only ', were insisted on by Uddyotakara[1]. For the present it is sufficient to point out that the *trairūpya*, even as thus interpreted, makes the syllogism essentially an affair of *examples,—sapakṣas* or concrete cases of P, and *vipakṣas* or concrete cases of the absence of P : and that there is nowhere to be found in it a statement of universal connection between M and P *as abstract characters*. The ' canons' amount to this, that if you can point to cases in which M is P (*sapakṣa*), and your opponent cannot point to any case of non-P (*vipakṣa*) in which M *is* found (all adduced cases of non-P being *non-M*), then your middle term is valid. On such a view of inference it is necessary that there should *be* concrete examples. And this tradition of the necessity of actual concrete cases continued even after the *trairūpya*

[1]It is clear from Uddyotakara's criticism that Diṅnāga read '*avadhāraṇas*' into his formula, probably in virtue of the doctrine that words have significance through '*apoha*', i.e. exclusion of all else If you say A is B, your real meaning may be that A is not-not-B,—or, if you prefer, that A is not-not B,—or again that not-not A is B, or even that not-not A is not-not not-not B.

had in fact changed its meaning: so that the second and third canons still retained the implication that there must be *sapakṣas* and *vipakṣas*, and the habit of quoting 'examples' in the 'major premise' (accordingly called always by a name which implies *exemplification*,—*udāharaṇa* or *nidarśana*) became ingrained in the Indian logician.

The *trairūpya* however began to lose its simple character as a statement of the rules of argument from example as soon as the restrictive particle *eva* began to appear in the interpretation or formulation of the second and third canons: as for example it does in the third canon in the lines cited by Praśastapāda. You are no longer content to adduce non-P's which are non-M in support of your M's which are P. You take the very significant step of asserting that non-P's are *only* to be found in the absence of M. The intention of the 'only' may have been quite innocent in the first instance. "My opponent *does not* adduce a case of non-P which is M. But he would if he could. *Ergo* he *cannot*." From which it is a natural, though not a necessary, step to "Non-P's *cannot* be M". But that is the same as saying that *only* P's can be M. And so the 'only' must find its way into the second canon also, as soon as it has appeared in the third. The *trairūpya* has now assumed the form in which the *Nyāyabindu* formulates it: open to the obvious criticism that the insertion of the 'only' into both clauses makes both clauses say exactly the same thing, viz., that M cannot be non-P.

Moreover, examples as such do not show that M *cannot* be non-P (*avinābhāvaniyama*)—all that the examples show is that M *as a matter of fact* has been found (*dṛṣṭa*) to be P, and that non-P has *as a matter of fact* been found to be non-M.—Examples cannot prove an 'only' in any other sense than in the sense of invariable experience (*bhūyodarśana*), which will always be exposed to the danger of a contradictory experience.

How a really universal connection could be arrived at was a difficult question, in connection with which is sometimes cited[1] this couplet from a Buddhist writer [2]*kāryakāraṇabhāvād vā svabhāvād va niyāmakāt avinābhāvaniyamo, ' darśanān na, na darśanāt.* " A rule of inseparable connection arises from a necessitating causal relation or identity of nature; not from negative experience, nor yet from positive experience". You may doubt the inseparability of a connection asserted merely on the basis of frequent experience (*bhūyodarśana*) · but you cannot doubt a connection which rests in the causal relation (*tadutpatti*) or identity (*tādātmya*) : for the denial of these relations is self-contradictory: and, according to the maxim later formulated by Udayana,[3] *vyāghātāvadhir āśaṅkā*—self-contradiction sets bounds to doubt.

But, whatever solution may be offered of the problem of the justification of an assertion of inseparable connection—the assertion that M 'is not without' P (*avinābhūta, avinābhāva*)—, the necessity of an explicit assertion of such inseparable connection in the *trairūpya* must have become plain, as soon as Vātsyāyana's innocent formulation of the *udāharaṇa*[4] was exchanged for the sophisticated ' *vidhi* ' or statement of principle[5] which had the

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[1] e g *Sarvadarśanasamgraha*, chapter on the *Bauddha* system, first page · *Nyāyakandalī* p 207 l. 8 *Tārkikarakṣā* p 82

[2] Vidyābhūsana *HIL* p. 376 (footnote 5) identifies this couplet as from Dharmakīrti's *Pramāna-vārtika-kārikā*.

[3] *Kusumāñjali* III. 7. quoted in *Sarvadarśanasaṁgraha, loc cit*

[4] *NBh.* (on *NS* I. i. 39) p. 44 ll. 6 and 8. *utpattidharmakaṁ sthalyādi dravyam anityam ity udāharaṇam vaidharmyokte 'pi* [in the negative form of the argument] . . . *anutpattidharmakam ātmādi dravyaṁ nityaṁ dṛṣṭam.* "Pots and other substances which have the character of being produced are non-eternal . . The soul and other substances which have not the character of being produced are seen to be eternal"

[5] *yatra dhūmas tatrāgnir, agnyabhāve dhūmo 'pi na bhavati. PBh* p 205 1 10

"Where there is smoke there is fire—in the absence of fire smoke also is absent" ..M is P, and non-P is non-M.

yat prayatnānantarīyakam tad anityaṁ dṛṣṭam, yathā ghataḥ . . nityam aprayatnānantarīyakam dṛṣṭaṁ, yathākāśam. "All that is the result

effect of turning the *udāharaṇa* or *nidarśana* into what we should call a 'major premise'.

In what has been said so far the later interpretation of the first clause of the *trairūpya* has been followed, according to which the first clause lays down the requirement of *pakṣadharmatā*, i.e. states that S must be M (and not that M must be P, which would be the form taken by an assertion of *avinābhāva*). But reasons *a priori* have been given which would supply a motive for interpreting the first clause in the sense of a statement that M must be P. And, in view of the constant ambiguity in the use by the early schools of the term translated *probandum*—*sādhya* or *anumeya* [1]—there is nothing to prevent our assigning either sense to the word *anumeya* in Dinnāga's and Praśastapāda's statement of the first clause. Keith maintains[2] that Dinnāga meant by his first clause that S must be M, while Praśastapāda meant by it that M must be P. His first argument for this interpretation of Diṇnāga's meaning,—namely, that the *Nyāyabindu* interprets it so—, may be set aside. Later commentators always interpret older writers in the light of the notions prevalent in their own time and the same argument would also prove that Praśastapāda's first clause means that S must be P; because in his case also the later commentator, Śrīdhara, says plainly that he meant this[3]. But we can safely ignore here the interpretations which Dharmakīrti and Śrīdhara give of Dinnāga

of volition is found to be non-eternal, like a jar the eternal is found not to be the result of volition, like ether."

[1]We may take *sādhya* or *anumeya* as an ambiguous abbreviation for either *sādhyadharma* (*anumeyadharma*) or *sādhyadharmin* (*anumeyadharmin*), in which case the ambiguity of the terms is an accident of language Or we may suppose that the ambiguity was an ambiguity of thought natural to the earliest formulation of inference, and that this ambiguity was subsequently realised—and that *then* the distinction between the *sādhyadharma* and the *sādhyadharmin* was drawn The latter supposition seems to be the true one

[2]*Indian Logic and Atomism*, pp 137-8.

[3]*NK* p 200 l. 23 "*anumeyaḥ pratipipādayiṣitadharmaviśiṣto dharmī*". Again p. 201 l. 23 "*anumeyenārthena sādhyadharmiṇā*".

and Praśastapāda respectively.—Another argument which Keith uses is however a real difficulty for those who, like Śrīdhara, interpret Praśastapāda's *anumeyena* to mean *anumeyadharmiṇā*. The argument is that in the second clause *tadanvite* must mean *anumeyadharmānvite* : and if *tad* means *anumeyadharma* here, then *anumeya* in the first clause (which is denoted by *tad* here) must also mean *anumeyadharma*[1]. The same reasoning could be used (though Keith does not make this application of the argument) to prove that Diṅnāga must have meant by *anumeya* the minor term, *anumeyadharmin;* because *tattulya* clearly means 'like the subject, or minor term'.—

[1]The opposite of this argument is used by Vātsyāyana on *NS* I. i. 36, where he points out the two senses which *sādhya* may have "*sādhyaṁ ca dvividhaṁ, dharmiviśiṣṭo vā dharmaḥ śabdasyānityatvam, dharmaviśiṣṭo vā dharmī anityaḥ śabda iti*". The *sūtra* is *sādhyasādharmyāt taddharmabhāvī dṛṣṭānta udāharaṇam*. Vātsyāyana argues that *sādhya* here must mean *sādhyadharmin*, because *tad* denotes *sādhya*, and *tad* must mean *sādhyadharmin* in the phrase *taddharmabhāvī*.

Keith's argument is, I think, not conclusive, because it depends on the presumption that a term cannot be used in two senses at once. It is possible that the sense of *anumeya* was left, deliberately or not, indeterminate in the first clause In that case the *tad* in the second clause would have its sense fixed in one or other direction by the phrase in which it occurs. If you use the phrase *tattulya*—as Diṅnāga did—then *tad* is fixed in the sense of *sādhyadharmin* the phrase meaning 'homogeneous with the minor term [though Vidyābhūṣana and Keith translate it, 'homogeneous with the major term']. If however you prefer to use the phrase *tadanvite* in the second clause, as Praśastapāda did, then your *tad* is determined as pointing to the *sādhyadharma* element in the fluid term *sādhya* of the first clause, and must be rendered 'endowed with the major term' But this does not prove that Diṅnāga's *anumeya* in the first clause meant minor term, and that Praśastapāda's *anumeya* in the first clause meant on the contrary major term They may both have left the meaning of *anumeya* fluid in the first clause and the choice of the different phrases in the second clause may *at most* indicate that one element in the fluid meaning tended to predominate in Diṅnāga's mind, while the other element tended to predominate in Praśastapāda's mind But I do not think it indicates even this much.

It should be mentioned in this connection that the first clause of Diṅnāga's *trairūpya* is always criticised by Uddyotakara as referring to *pakṣadharmatā* This of course proves nothing as regards the actual meaning of Diṅnāga Uddyotakara would naturally criticise Diṅnāga in the light of the meaning which his later Buddhist followers read into their master's words. What however is of some interest is the fact that Śrīdhara answers the objection which Uddyotakara brings against Diṅnāga in this connection, as if it were a criticism of Praśastapāda a.so See *NK* p. 200 l 24 ff. (lines 24-25 seems a quotation of *Vārtika* p. 58 l. 6).

But as a matter of fact Praśastapāda himself in another passage[1] uses the term *tatsamānajātīya*,—which is of course synonymous with Diṅnāga's *tattulya*. And in the light of this passage the argument from *tadanvite* seems to lose the weight which otherwise one would be inclined to allow it. So far as these arguments go then, there is no reason to suppose that Diṅnāga meant by his *anumeye sadbhāvaḥ* something different from the meaning which Praśastapāda attached to the phrase *anumeyena sambaddham* : nor is there, in these arguments, any proof of what meaning the two authors *did* attach to these phrases.

Turning to Praśastapāda's explanation[2] of the phrase *anumeyena sambaddham*, and to various other passages[3] in his *Bhāṣya* which connect with this topic, we find that while his explanation supports the interpretation of *anumeyena sambaddham* as a statement that S is M (*pakṣadharmatā*[4]), the other passages make it sufficiently clear that his logic embodies a doctrine of universal connection between abstract ' terms, ' M and P (*anumeyasāmānya, liṅgasāmānya*), for which the *trairūpya* seems to find no place when its first clause is interpreted as a statement that S must be M. The explanatory passage runs : *yad anumeyenārthena deśaviśeṣe kālaviśeṣe vā sahacaritam, anumeyadharmānvite cānyatra sarvasmin ekadeśe vā prasiddham, anumeyaviparīte ca sarvasmin pramāṇato 'sad eva, tad aprasiddhārthasyānumāpakaṁ liṅgaṁ bhavatīti.* "That which at any particular

[1] *PBh* p. 237 l 16—18.

[2] *PBh* p. 201. ll. 18—20, cited and translated by Keith p 139.

[3] *PBh* p 205 ll 10—14, p 237 l 16 ff, p 246 ll. 15-16; p. 247 (*ananugatanidarśanābhāsa* ll 4 and 5, and *avyāvṛttanidarśanābhāsa* ll 7 and 8); p 249 ll 7—11

[4] I do not see how it can be said that "the wording confirms the view that the first condition refers to the relation of middle term and major, not of middle term and subject · the thing to be inferred is the fire on the mountain, not the subject which is not a thing to be inferred, but a thing whose attribute is to be inferred from the mark". This interpretation of *anumeyenārthena* seems to me to beg the question. I cannot see that the addition of *artha* to *anumeya* makes any difference If Praśastapāda had wished to be clear he could have said *dharmeṇa* instead of *arthena*.

place or at any particular time is concomitant with the *probandum-thing;* which elsewhere also is known to exist in things possessing the quality which is to be proved, whether existing in *all* such things (i.e. *sapakṣas*, XP's) or only in *some* of them; and which is known from some valid instrument of knowledge to be only absent (and never present) in everything that is different from the *probandum* :—this is the mark which enables us to infer something not (otherwise) known.''[1]

Taking the language of this passage at its obvious value, we should surely not hesitate to interpret Praśastapāda as meaning that *anumeyena sambaddham* is an assertion that S must be M. The word *anyatra* is glossed ' *sapakse* ' by Śrīdhara and seems clearly to imply that the first clause has had a reference to something other than the *sapakṣa's*—and this something other than the *sapakṣa* can only be the *pakṣa*. Moreover the phrases *deśaviśeṣe kālaviśeṣe vā* seem to be altogether inappropriate to the statement of a universal concomitance, but appropriate to a statement that this or that particular S is M.

I believe that the *trairūpya* was a legacy inherited by Praśastapāda and Diṅnāga from an earlier phase of

[1]The only addition made in this account is that the middle need not be present in *all sapakṣas*—it is sufficient if some XP's are found to be M (in the terminology of our syllogism, although *all* M must be P, it is not necessary that all P should be M) Thus the list of Nine Types of Syllogism given in the *Nyāyapraveśa*, and in the *Pramāṇasamuccaya* of Diṅnāga, contains two valid types, according as *all* XP's are M, or *some* XP's are M Praśastapāda mentions this again, and gives as examples the two valid arguments—

Wind is substance

Because it possesses movement, and

Wind is substance

Because it possesses qualities

The latter middle is present in *all* 'things homogeneous with the probandum', i.e. all substances possess qualities. The former middle on the contrary is present in some substances only, e g. *diś*, *kāla*, and *ātma* are reckoned as substances, but they are not capable of movement

logical reflection: and that it could not from its very nature adequately express the universal connection in which they both found the principle of inference[1]. It is possibly a mistake to suppose that they tried to read a statement of universal connection into the *first* member of the *trairūpya*. Is it not more likely that, since they made the *nidarśana* the vehicle of the statement of the universal connection, they would attempt to find the statement of the necessity of a universal connection in the second and third clauses of the *trairūpya*, which are obviously concerned with the *nidarśana*?

SECTION 5 CLASSIFICATION OF FALLACIOUS MIDDLE TERMS

Twofold classification of the Vaiśeṣika Sūtra

PBh. p. 204. and pp. 238-9. Praśastapāda devotes a brief paragraph to the interpretation of *Vaiśeṣika Sūtra* III. i 15.—The paragraph serves as an explanation of the second of the two couplets which he cites on p. 200 (see above, p. 180).

yat tu yathoktāt trirūpaliṅgād ekena dharmeṇa dvābhyām vā viparītam, tad anumeyasyādhigame liṅgaṁ na bhavatīty etad evāha sūtrakāraḥ APRASIDDHO 'NAPADEŚO 'SAN SAṀDIGDHAŚ *Ceti.*

"But a middle term which differs from the mark with the three characters as just explained, in one character or in two, is not a mark which proves the *probandum*: this is what the author of the *sūtra* means when he says 'the false reason is the unproved, the unreal, and the doubtful' ".

[1]Śrīdhara says "*avinābhūtam iti jñānam yasya nāsti, taṁ prati dharmiṇi dharmasyānvayavyatirekavato 'pi liṅgatvaṁ na vidyate*". *NK* p. 205 l. 7.

It seems clear[1] that Praśastapāda misinterprets the *sūtra* : for the next two *sūtras* give instances of *two* classes of fallacious reason, namely, of the '*asat*'—*yasmād viṣāṇi tasmād aśvaḥ*, ' it is a horse because it has horns'[2],—and of the '*saṁdigdha*'—*yasmād viṣāṇī tasmād gauḥ*, ' it is a cow because it has horns : ' and if the *sūtra* had intended three classes of fallacious reason it

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[1]Jacobi, *Indische Logic* p. 481 Keith *ILA* p 189, and 133. Faddegon, *Vaiśeṣika System*, p. 302. Faddegon notes that "Candrakānta Tarkālaṁkāra splits up III i 15 into two aphorisms · *aprasiddho 'napadeśah* and *asan saṁdigdhaś cānapadeśaḥ* " The addition of the last word (*anapadeśah*) is a variant later than Praśastapāda's time, since he does not read it It was perhaps added because the tradition of splitting up the '*sūtra*' into two *sūtras* remained · and, when thus split up, Praśastapāda's interpretation is no longer plausible

[2]But Praśastapāda p 238 l 20 gives this as an example of *viruddha*. And this is a natural way to understand the example The '*asat*' of the *sūtra* may in fact=the *viruddha*.

I do not think that the Sūtrakāra recognises the '*asiddha*' class of fallacy at all His '*asat*' means an argument in which the conclusion (not the middle term) 'is *not*' just as his *samdigdha* means an argument in which the conclusion (not the middle) is doubtful The example given of '*asat*' is clearly an example in which the *probandum* definitely is *not*, for what has horns is *not* a horse That is to say it is a case of the *viruddha* or 'contradictory' reason

Similarly the *Nyāyasūtra* does not recognise the '*asiddha*' fallacy : nor does Vātsyāyana It begins to figure in Praśastapāda The evidence then is that '*asiddha*' is a relatively late concept This seems to carry with it the implication that *pakṣadharmatā* was not emphasised in the earlier logic · which again means that the first clause of the *trairūpya* can hardly have meant for its earliest formulators precisely what later commentators understood it to mean, viz , the requirement of '*pakṣadharmatā*' that M must reside in S —But if the first clause did not mean this, what *did* it mean? I have argued above that it probably did not mean the requirement that 'all M must be P'. And there seems to be no other alternative.

Yet perhaps there is an alternative. If we remember how vague Vātsyāyana is about the function of the *hetu* or second member of the syllogism, we may well expect a similar 'vagueness in the meaning of the *anumeye' iti* or *anumeyena sambaddham* of the first clause in the *trairūpya*. The formulator of the *trairūpya* had not made up his mind about the meaning of *anumeya*. It was not exactly S, and it was not exactly P. It did not as S *exclude* the examples, XP's · nor was it sufficiently abstract, as P, to *include* them. It might have developed the latter sense, had not the *nidarśana* usurped the function of stating the universal concomitance. Precluded from developing this sense, it developed the other sense—'*anumeya*' became S and the first clause of the *trairūpya* became a requirement of *pakṣadharmatā*. I think we see the *beginnings* of this in Praśastapāda but I think the conception was still fluid, i e. that *anumeya* was neither quite definitely S nor quite definitely P for him.

would presumably have exemplified the third also. Moreover Praśastapāda's explanation of *aprasiddha* as applying also to the fourth class, *asādhāraṇa* or *anadhyavasita*,—which he adds,—is altogether improbable. It seems almost certain therefore that the *sūtra* must be read in two parts—*aprasiddho 'napadeśaḥ. Asan saṁdigdhaś ca.* "The doctrine of Kaṇāda as now restored to the text of the *Sūtra* is perfectly plain : it states a definition of a fallacious reason (*anapadeśa*). . . as that which is unproved (*aprasiddha*). Of the fallacious reasons two species are mentioned, the unreal (*asat*) and the doubtful (*saṁdigdha*), which correspond accurately enough to the later *asiddha* and *savyabhicāra*[1]".

The phrase *ekena dharmeṇa dvābhyāṁ vā* became a source of doubt to the commentators at a later period, after Uddyotakara (or some earlier writer) had drawn attention to the existence of apparently valid middle terms which satisfy only two conditions of the *trairūpya*,—the *kevalānvayin* and *kevalavyatirekin* of the later schools. There is no evidence that either Praśastapāda or Diṅnāga had raised the problem involved in this distinction. But Śrīdhara, commenting on Praśastapāda from the standpoint of the later schools, raises the question[2]. He says that some hold that the *kevalānvayin* and the *kevalavyatirekin* (although apparently excluded by the *trairūpya*) must be supposed to be included among valid reasons in virtue of their establishment in the sister-*śāstra* (i.e. the *Nyāya*)[3] : while others say that the definition embodied in the *trairūpya* is to be taken '*vyastasamasta*', i.e. it is intended to apply as a whole (*samasta*) to the ordinary

[1]Keith, *ILA*, p 183 The amended reading of the *sūtra* is given in his footnote But his identification of *asat* with *asiddha* can be questioned. See preceding note.

[2]*NK* p. 203 l 15—p. 204 l. 22.

[3]*NK* p 204 l. 17 *atraike samānatantraprasiddhyā kevalānvayinaḥ kevalavyatirekiṇaś ca parigraha iti vadanti. apare tu samastavyastaṁ lakṣaṇaṁ vadanti*, etc The appeal to the sister-*śāstra* (the *Nyāya*, in this case) has an early precedent in *NBh*. p. 16 l. 9.

anvayavyatirekin, which must satisfy all three conditions of the *trairūpya* : but it is only intended to apply by parts (*vyasta*) to the *kevalānvayin* and *kevalavyatirekin* : the former being valid if it satisfies the conditions of presence in the *pakṣa* and presence in the *sapakṣa* (no *vipakṣa* being available); the latter being valid if it satisfies the conditions of presence in the *pakṣa* and absence in the *vipakṣa* (no *sapakṣa* being available).

Fivefold classification in the Nyāya

The *Nyāya Sūtra* (I. ii. 4—9) enumerates and defines five fallacious reasons : but they do not correspond, except in the case of the first one defined, with the fivefold division which became classical in the school later, and which was partly derived from *Bauddha-Vaiśeṣika* logic. The meaning of the *sūtra* defining the last kind, *kālātīta*, had already been lost in *Vātsyāyana's* time[1], as is clear from the fact that he reports two different opinions about it. The identification of it with the *bādhita-hetvābhasa* of the later school is a guess. It may be a correct guess : but Vātsyāyana himself does not even hint at any such identification.

(1) *Sūtra* 5. ANAIKĀNTIKAḤ SAVYABHICĀRAḤ

This is the *samdigdha* or *aniścita* of *Vaiśeṣika-Bauddha* logic,—the inconclusive or doubtful reason. It retained the same name and nature throughout the history of the schools. Vātsyāyana gives the example : 'Sound

[1]This implies a considerable lapse of time between the date of Vātsyāyana and the first systematisation of the *Nyāya*. In his comment on I ii 9 he cites a couplet .—

yasya yenārthasambandho dūrasthasyāpi tasya sa

arthato hy asamarthānām ānantaryam akāranam

The meaning seems to be that when one word is connected by the sense with another, the connection holds good even if the word is far off (in the order of the sentence), and that juxtaposition does not give meaning to words disconnected in sense.

If this citation could be identified it might provide valuable evidence of Vātsyāyana's date. It has not yet been identified.

is eternal because intangible'. The alleged reason, he remarks, is not confined to the one alternative (*ekatra avyavasthitiḥ*); or, it is too wide (*saha vyabhicāreṇa vartate*): for atoms (which are eternal) are tangible, so that there cannot be a *probans-probandum* relation in the supposed probative negative instance 'the jar which is tangible is transitory'; while consciousness (which *is* intangible) is *not* eternal, so that the supposed probative positive instance 'the soul is intangible and eternal' is equally defective. Western logic would say: it is impossible to assert that *All* intangible things are eternal, and to draw the desired conclusion in BARBARA—

(All) intangible things are eternal
Sound is intangible
Therefore sound is eternal—

for the middle would *in fact* be undistributed; since some intangibles (consciousness) are in fact *not eternal*. It is however useless to attempt to equate the Indian *savyabhicāra* with the western 'undistributed middle'. The Indian is concerned with the question whether the examples show the alleged connection of characters: that is to say, with the question of the material truth of the major premise. The quantitative formalism of the western syllogistic is therefore quite alien to Indian logic: and the attempt to identify the two schemes of fallacy can only lead to confusion[1].

[1] The western formalist would feel that the negative instance is quite irrelevant and consequently would say that the objection brought against the present argument, on the ground that atoms although eternal are tangible, is altogether out of place for the fact that some tangible things are eternal is perfectly consistent with the supposed major premise 'All intangible things are eternal', so far as 'formal consistency' is concerned. There is really no point in examining non-M's, cases where the middle is not found, from a merely formal point of view: for even if you could prove that all non-M is P it would not contradict the major All M is P. The relevant formal counter-instance will be a case of non-P which is M. Therefore it is relevant to examine non-P's (*vipakṣa*): and if you find that no non-P is M (all non-P is non-M) you will have confirmed your positive major All M is P, by establishing its obverse. This is the line which *Vaiśeṣika-Bauddha* logic took; and in doing so it approached a formal standpoint. But the earlier *Naiyāyika* school was concerned to examine cases of M

Vātsyāyana sums up the objection to the argument under consideration by saying that both kinds of example, positive and negative, are forthcoming, and that in both of them there is inconclusiveness[1]; and therefore the *probans-probandum* relation does not subsist here (*dvividhe ' pi dṛṣṭānte vyabhicārāt sādhyasādhanabhāvo nāsti*).

(2) *Sūtra* 6. SIDDHĀNTAM ABHYUPETYA TADVIRODHĪ VIRUDDHAḤ

" The contradicted reason is that which after accepting a tenet contradicts it."

This does not correspond with the normal type of the *viruddha* as expounded in later logic, which follows *Vaiśeṣika* teaching here, giving the name to a middle term which proves the contradictory of what it purports to prove : as, this creature is a horse because it has horns. Nor does the *sūtra* apparently intend a fallacy like the *iṣṭavighātakṛt* variety of the *viruddha*[2], in which the middle contradicts some implication of the position which it is used to prove.

Vātsyāyana says :—" For example, 'This particular form of reality (*vikāra*) ceases to be manifested, because it is inconsistent with permanence' · 'A particular form of reality exists even after it has ceased to be manifested, because it is inconsistent with being destroyed'. The middle term states that a permanent particular form of existence is not possible; and this is contradicted by the

(*sādharmya*) and cases of non-M (*vaidharmya*); not cases of P (*sapakṣa*) and cases of non-P (*vipakṣa*) And if they found that M did not extend to non-P (*sādharmyaṁ na vyabhicarati*) and that non-M did not extend to P (*vaidharmyaṁ na vyabhicarati*) they were satisfied that M was probative (*sādhanabhūta-dharma*) with reference to P They were not formalists, but aimed at establishing a real connection of M and P. And for this purpose it *is* relevant to find that non-M is non-P and it *is* an objection to the theory that M is connected with P if we find a case of non-M which is P, i.e. in the present argument, if we find that atoms which are tangible (non-M) are nevertheless eternal (P)

[1]See the preceding footnote.

[2]See p. 203 ff and footnote to page 204, *infra*.

defendant's own tenet 'a particular form of reality exists even after it has ceased to be manifested'."

The difference between the *sūtra's* meaning and the *iṣṭavighātakṛt* is that the former does not represent the tenet which is contradicted by the middle term as being an implication of the position which the middle term purports to establish. The nature of the fallacy, as explained by Vātsyāyana, is that the defendant proves of one subject in a pair of syllogisms two qualities which cannot co-exist because they are mutually contradictory,—namely, cessation of manifestation, and continued existence (*astitvaṁ cātmalābhāt pracyutir iti ca viruddhāv etau dharmau na saha sambhavataḥ*) The two middle terms are of course also mutually contradictory.—Either argument, in itself, is not objected to. The fallacy lies, not in either argument taken separately, but in the combination of them. As thus expounded the fallacy comes very near to the antinomy (*viruddhāvyabhicārin*) of Diṅnāga: but (assuming that one or other of the middle terms is false) we may follow Praśastapāda in classing it with the *viruddha* variety of Fallacious Proposition: in which case it is really the *bādhitahetvābhāsa* of the later schools[1].

(3) *Sūtra* 7. YASMĀT PRAKARAṆACINTĀ SA NIRṆAYĀRTHAM APADIṢṬAḤ PRAKARAṆASAMAḤ

"When the quality from which the question arises is adduced as proving (one of the alternatives), the reason is called *prakaraṇasama*, *petitio principii*, 'identical with the question'."

Vātsyāyana's example is: 'Sound is transitory, because we do not find in it the characters of a permanent thing, and things like jars in which the characters of permanent things are not found are transitory: Sound is permanent, because we do not find in it the characters of transitory things, and things like ether in which the qualities of transitory things are not found are permanent'.

[1]See *infra* p. 212 with footnote

The argument to prove either alternative 'begs the question'[1]. But comparing the language of Vātsyāyana with that used by Praśastapāda in speaking of his *asādhāraṇa* or *anadhyavasita*, the reason which leads to no conclusion (*adhyavasāyam na karoti*), there is no doubt that Praśastapāda conceived himself to be merely interpreting the *Nyāya-sūtra's prakaraṇasama* fallacy in his own *anadhyavasita* He is almost certainly writing with reference to Vātsyāyana. Both of them make the same distinction between the *savyabhicāra* (*saṁdigdha*), which Vātsyāyana here explicitly calls *saṁśayasama*, on the one hand, and the *prakaraṇasama* or *anadhyavasita*, on the other hand The distinction is that in the former fallacy a common quality which gives rise to a doubt is taken as a conclusive reason · as Vātsyāyana says, *yatra samāno dharmaḥ saṁśayakāraṇam hetutvenopādīyate sa saṁśayasamaḥ savyabhicāra eva* · whereas in the latter fallacy there is a *vimarśa* or suspense of judgment due to complete *absence* of evidence (as opposed to *saṁśaya*, a pair of doubtful judgments suggested *by evidence*, but by evidence which is inconclusive in either direction). We are, in the case of *vimarśa*, looking for decisive evidence but we do not find it (*vimarśasya viśeṣāpekṣitā ubhayapakṣaviśeṣānupalabdhiś ca*) : and this state of affairs 'starts a question' (*prakaraṇaṁ pravartayati*), but supplies no evidence whatever—not even doubtful evidence—towards a conclusion.

It seems clear then that the affiliation of this fallacy is with the *anadhyavasita* of Praśastapāda, that is to say, with the *asādhāraṇa* of the later schools : while the *savyabhicāra* of the *Nyāya-sūtra* affiliates with the *sādhāraṇa* variety of *savyabhicāra* in the later classification.

[1] For the *jāti* which bears the same name see p 517 below. The *prakaraṇasama-jāti* pretends to show that *any* argument whatever merely 'starts the question' (*prakaraṇaṁ pravartayati*), and therefore commits this fallacy.

It would be a mistake to equate it with the *viruddhāvyabhicārin* of Diṅnāga, which is the *satpratipakṣa* of the later schools,—a genuine antinomy, where both arguments are equally strong though they lead to contradictory conclusions. Neither Vātsyāyana nor Praśastapāda will admit the possibility of antinomy. There is no *satpratipakṣa* in the genuine *Naiyāyika* tradition : it is an aberration in classification adopted by the later schools from *Bauddha* logic.

(4) *Sūtra* 8. SĀDHYĀVIŚISTAŚ CA SĀDHYATVĀT SĀDHYASAMAḤ

" And a reason which is indistinguishable from the *probandum* in respect of having to be proved is called the reason which is 'identical with the *probandum*'."

This clearly resembles the preceding fallacy in being a kind of begging the question · and this kinship with the previous fallacy is no doubt indicated by the word 'and' with which the present *sūtra* commences. Its historical affiliation however is with a variety of the 'unreal reason' or *asiddha-hetvābhāsa* of Praśastapāda and the later schools[1]. The variety with which it corresponds is the *āśrayāsiddha*. The example which Praśastapāda gives (under the rubric *anumeyāsiddha*, which = the later *āśrayāsiddha*) is "Darkness is substance because it possesses black colour " : the reason here assumes what has to be proved, for we cannot assert possession of a quality unless we already admit that darkness is a substance. Vātsyāyana's example of *sādhyasama* is almost identical : " Shadow is substance because it moves ". He points out that the movement of the shadow is the very thing to be proved : does it move, as a man moves? or is it not the case that, with the movement of some body which cuts off the light, there is a series of obscurations of different portions of light?

[1]This is pointed out in the *Vṛtti* on this *sūtra*.

(5) *Sūtra* 5. KĀLĀTYAYĀPADISTAḤ KĀLĀTĪTAḤ

"When a thing is alleged as cause of an effect which goes beyond it in time, the fallacy is called the time-lapsed reason".

The example given by Vātsyāyana is: Sound is permanent because it is *manifested* by a conjunction (of bodies), like colour (which is *manifested* by the lamp only because it was there "all the time"). There is no more reason in the one case than in the other to suppose that the quality itself comes into existence through the agency which makes it manifest to us Just as the colour was in the jar before the light fell upon it, so the sound was in the drum before the drum-stick came in contact with it

The two cases, Vātsyāyana says, are not parallel: for in the case of colour the manifestation of the manifested quality does not go beyond the time of the manifesting agency (contact with light); *cessante causā cessat effectus*. But the sound is heard by a person at a distance after the contact of the drum and drum-stick has ceased, and so the production of the quality in this case "goes beyond the time" of the contact (*samyogakālam atyeti*), and therefore is not merely a manifestation. for from the absence of the cause follows the absence of the effect (*kāraṇābhāvāddhi kāryābhāvaḥ*).

The meaning seems to be this. In the case of the colour we can say that the *manifestation* is the effect of contact of light with coloured object; and so we can hold that the colour was there all the time and is not an effect which comes into existence through contact with light. But in the case of sound we cannot say that the *manifestation* is the effect since the sound may be heard after the alleged cause has ceased to exist. In this case then the indication is that *sound itself* is the effect of the contact of drum and stick: and so we have no ground for

saying that it was there before but was 'manifested' by the contact of drum and stick.

This seems to be a not unreasonable explanation of the *sūtra*, which then is concerned with a fallacious inference of causation. The argument criticised played a very important part apparently in early controversies and it is not unlikely that the *sūtrakāra* should give the fallacy which the *Naiyāyika* finds in it a special place in his classification of fallacies. But the meaning of the *sūtra* was already uncertain; and Vātsyāyana goes on to argue against another interpretation of it which identifies it with the *nigrahasthāna* described in V.ii.11 under the name of *aprāptakāla*, the 'mistimed' This however consist merely in failure to state the members of the syllogism in conventional logical order (*avayavaviparyāsa*): and Vātsyāyana argues that a reason does not cease to be a true reason and become a fallacy merely because the premises are not stated in a particular order. And he adds that the *sūtrakāra* would not have said the same thing twice, once under the head of *hetrābhāsa*, and then again under the head of *nigrahasthāna*

Fourfold Classification of Praśastapāda

Praśastapāda's detailed account of fallacious reasons is given in the context in which he treats of *apadeśa* as a member of the five-membered 'syllogism', under the general heading of 'inference for another' (*parārthānumāna*)[1] :—

" The account of the 'statement of the mark' which has just been given implies that a statement of an unreal, contradictory, doubtful, or inconclusive (*anadhyavasita*) mark is no 'reason' (*anapadeśa*)."

[1]*PBh* pp. 238-9 It is a practical inconvenience of the distinction between *svārthānumāna* and *parārthānumāna* that it tends to lead to a double treatment of the same topic under different heads

(i) *Varieties of the asiddha or unreal reason*

"There are four kinds of unreal (*asiddha*) reason: unreal for both parties (*ubhayāsiddha*); unreal for one or other of the parties (*anyatarāsiddha*); the reason that is not really what it purports to be (*tadbhāvāsiddha*); and the reason that is unreal in respect of the subject (*anumeyāsiddha*)[1]. An example of the first kind (*ubhayāsiddha*) i.e. of a reason which both the defendant and the opponent regard as unreal, would be: 'sound is non-eternal, because it has parts (*sāvayavattvād*)'.

An example of the second (*anyatarāsiddha*) would be: 'sound is non-eternal, because it is a product'[2].

An example of the third (*tadbhāvāsiddha*) would be mist presumed to be smoke when fire is to be inferred through the existence of smoke[3].

An example of the fourth kind (*anumeyāsiddha*) would be 'darkness is an earthy substance, because it possesses black colour'[4]

NOTE—The *Nyāyapraveśa* list is practically identical with this See Vidyābhūṣaṇa *HIL* p. 293 (=*MSIL* p 93) The *Śloka-vārtika* (*anumāna-pariccheda* 75—83— uses the later terminology of *svarūpāsiddha* and *āśrayāsiddha;* and makes *ubhayāsiddha*, *anyatarāsiddha*, and a third variety *saṁdigdhāsiddha*, sub-divisions of both these main classes; thus avoiding the cross-division involved in Praśastapāda's classification.

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[1]The obvious cross-division here is pointed out by Śrīdhara, *NK* p. 240 ll 16 ff

[2]The *Mīmāṁsaka* who maintains the eternality of sound does not admit that it is a product.

[3]Misunderstood by Vidyābhūṣaṇa *HIL* p 293 and by Faddegon p 541.

[4]*NK* p 240 ll 12—16. Śrīdhara explains it as *āśrayāsiddha* "*tamo nāma dravyāntaraṁ nāsti, āropitasya kārṣṇyamātrasya pratīteḥ*". The question is begged when we say 'because it possesses' What possesses qualities is a substance. But the whole question is whether darkness is *a thing which possesses* qualities. As Faddegon rightly says (p. 541) "The *anumeya* does not exist in the form in which it is supposed to exist in the argumentation". Darkness exists · but it does not exist as a possessor of qualities, i e. as a substance.

(*ii*) *The contradictory reason* (*viruddha*)

"For the middle term which, in addition to not being found in the Subject (*anumeya*), is not found in anything homogeneous with the Subject, and is present in the opposite of the Subject, is a *contradictory reason,* because it proves the opposite of what is to be proved: for example, 'it is a horse because it has horns'."

The connective 'for' (*hi*) appears to explain why Praśastapāda gives as an example of a contradictory reason the very argument which the *Sūtra* (III.1.16) has given as an example of the '*asat*',—which Praśastapāda identifies with *asiddha*. The connection of thought then is "The argument 'it is a horse because it has horns', even if the middle term does not exist in the Subject (*anumeye 'vidyamāno' pi*)—so that the argument would so far be a case of *asiddha*—, is also a contradictory reason in as much as it proves the opposite, i.e. it proves that the subject is *not* a horse" An unreal reason is not necessarily a contradictory reason, but a contradictory reason is necessarily unreal And it happens that the *Sūtra's* example of unreal reason is also an example of a contradictory reason.

Division of the contradictory Reason.
(a) Twofold Division.

No sub-divisions of the contradictory reason are given by Praśastapāda. The *Nyāyapraveśa* on the other hand gives *four* varieties under this head, while the *Hetucakra-ḍamaru* doctrine (which is embodied in the *Pramāṇa-samuccaya*) shows *two* arguments which are classed as contradictory. The two contradictory reasons given in the *Hetucakra* are[1]:—

Sound is eternal because a product

Sound is eternal because an effect of volition

[1] *NK* p 241 l. 2 says that Praśastapāda's example corresponds to the second of these, its rubric being *vipakṣaikadeśavṛtti* (i e it is found in *some vipakṣas*, not all: not all non-horses have horns, but some have).

These correspond to the two valid types given in the *Hetucakra*—Sound is non-eternal because a product: Sound is non-eternal because an effect of volition. The two reasons which lead in valid syllogisms to the conclusion that sound is *non-eternal* are two varieties of the *contradictory* when used to prove that sound is *eternal*.

(*b*) *Fourfold Division.* The fourfold division of the *Nyāyapraveśa* includes the former of these two, but ignores the latter: and adds three others[1].

The fourfold list is:—

(1) Where the middle contradicts the major—'Sound is eternal because a product'. See above for this. The *Ślokavārtika* gives the same example, and describes this variety of *viruddha* as *dharmabādha*, i e. sublation of the major.

(2) "When the middle contradicts the implied major" (Vidyābhūṣaṇa, *loc cit.*)

—'The eyes are serviceable to some being because they are made of particles, like a seat, bed, etc.'[2].

Kumārila gives this argument as an example of his sixth class, *dharmadharmiviśeṣabādha*, i e. contradiction both of a particular quality implied in the major and of a particular quality implied in the minor:

tadobhayaviśeṣasya bādho 'yam sādhyate yadā
pārārthyaṁ cakṣurādīnāṁ saṁghātāc chayanādivat.
ātmānaṁ prati pārārthyam asiddham iti bādhanam

[1]Vidyābhūṣaṇa *HIL* pp. 294-5=*MSIL* pp. 94-5 Keith *ILA* p 135. *Śloka-vārttika*, *anumānapariccheda* ll 96—107

[2]Pārthasārathi Miśra in the *Nyāyaratnākara ad loc.* says that this is the *Sāṁkhya* argument to prove that *Puruṣa* is 'other than *Prakṛti*. The evolutes of *prakṛti* have reference to an 'other' The argument occurs in *Sāṁkhya Kārikā* 17, and Gauḍapāda gives the example of the 'bed'

asamhataparārthatve dṛṣṭe saṁhatatā 'pi ca
anahaṁkārikatvaṁ ca cakṣurādeh prasajyate.
(*Śl. Vārt. anumāna,* 104—107.)

"It is sublation of particular qualities of both major and minor when it is argued that the eyes and other organs serve the purpose of some 'other' because they are composites, like such things as beds. The 'serving the purpose of some other' which is illustrated in the example of the bed is service *of a composite*, and the middle term (compositeness) which this illustration carries with it is a middle term universally connected with *material* things: thus there is a sublation which may be expressed in the words 'serving a purpose *with reference to the soul* is not established': (the sublation consisting in the fact that) there *is* on the one hand compositeness in the thing experienced (the eye or the bed) although it is supposed [in the former case] to serve the purpose of the incomposite soul and on the other hand that the consequence would follow that the eye and other organs could not be evolutes from the ego-principle (*ahaṁkāra*), as the *Sāṁkhya* supposes them to be, if they were not composites[1]".

The *Sāṁkhya* argument is a good one—it is simply the teleological argument. The world is a *saṁghāta*, a collocation or arrangement of parts,—an arrangement which points clearly to a *user*. Material Nature cannot be its own user: matter has no purpose, intrinsically. Therefore there is an immaterial principle to whose uses matter is shaped.

It is a good argument. But it is not a good argument *for the Sāṁkhya*: because the *Sāṁkhya's* immaterial principle, *Puruṣa*, is by definition so antithetical to matter that it could have no purposes which material aggregates could subserve. And the organs of the sup-

[1] *NRA* explains compositeness as consisting in the '*guṇas*'—*sattva, rajas, tamas.*

posed purposes inconsistently attributed to the immaterial principle are explained by the *Sāṁkhya* as being in fact products of the material principle of '*ahaṁkāra*'. Thus there is a double inconsistency in the *Sāṁkhya's* use of the teleological argument to prove the existence of soul as separate from matter. (1) The function which he intends to establish as his major (*dharma*) is a function of a *particular kind* (*dharmaviśeṣa*) i.e. purpose *of the soul*. But his middle (*saṁhatatā*) really disproves the *particular sort of* function which he attempts to prove by it, if aggregates of matter are essentially indifferent to the soul. Again (2) the subject (*dharmin*) of this argument is the eye and other such organs. These are conceived of *in a particular manner* (*viśeṣa*) viz., as organs subserving *the soul*. But this way of conceiving of the organs is really sublated by the very middle term which the *Sāṁkhya* uses: for this middle term (*samhatatā*) draws attention to the *material* character of the organs and, considered as *material aggregates*, the *dharmin*, the eyes or other organs, are regarded, quite consistently, by the *Sāṁkhya* as evolutes of a purely *material* principle, the *ahaṁkāra*, the ego-principle. But the *Sāṁkhya* cannot have his *dharmin*, the sense-organ, in two ways at once. Either it is an evolute of matter; or else it is organic to the soul's purposes. But it cannot be thought of as both at once[1].

(3) When the middle term is inconsistent with the minor term. As :—

> '*Sāmānya* (generality) is neither substance, quality nor action; because it depends upon one substance and possesses quality and action.'

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[1]Keith applies the term *iṣṭavighātakṛt* (*ILA* p. 135) to this argument, and the term is appropriate. But it is not used in the *Ślokavārttika*, and there seems to be no evidence that Diṅnāga used it. It occurs however in the *Nyāyabindu* p. 118 l 17, where this same *Sāṁkhya* argument is given. For Dharmakīrti's further remarks on the argument see *NB* p 111 l. 3 He has defined *sādhya* so widely as to cover all that is *implied* in 'P'; and therefore he need not treat this *iṣṭavighātakṛt* as a separate variety of contradictory reason. It comes under the general rubric of 'M contradicts P'.

The statements here made contradict the definition of *sāmānya* as given by those who maintain that it is a separate category. The property of depending on one substance would prove the contradictory of what is maintained, for it would prove that *sāmānya* was either quality or action: and similarly the character of possessing quality or action would prove that it was substance. (The example is entirely artificial: it could have no existence except as an instance of an argument in a logic manual.)

It corresponds however to Kumārila's third type, *dharmisvarūpabādha;* "sublation of the essence of the minor" —

ihapratyayahetutvād dravyāder vyatiricyate
samavāyam, yathehāyaṁ ghaṭa ityādisangatih.
(*Śl Vārt.* *anumāna* 100-101.[1]).

"The category of *samavāya*, inherent relation, is separate from substance and the other categories, because it is the ground of the notion of a thing's being at a particular spot; for instance, such a conjunction of things as is expressed in 'here is the jar' ".

The very notion of the relation of inherence is sublated by the middle term. As the example shows, locality is an affair of *samyoga*, contact. What is really proved is that the relation is *not samavāya*,—seeing that it is supposed to be an affair of spatial contiguity between substances.

(4) When the middle term is inconsistent with the implied minor term. As :—

Objects (*artha*) are stimuli of action, because they are apprehended by the senses. (Vidyābhūṣaṇa notes: " 'Objects' is ambiguous meaning (1) things and (2) purposes. The middle term is inconsistent with the minor term in the second meaning".)

[1] This seems to refer to *VS* VII 2 26 [*Samavāyam* cannot be the right reading.]

'This appears to correspond to Kumārila's fourth variety, *dharmiviśeṣabādha*, sublation of a particular property of the minor :—

> *yac ca sattāvad ekatvaṁ samavāyasya kalpitam*
> *tatra saṁyogavad bhedāt syād viśeṣaviruddhatā.*
> (*Śl. Vārt.*, *anumāna* 102-103).

" And because unity is supposed to belong to the inherence-relation, as it does to the universal 'Being', there would be sublation of this character (of unity), because there would be a variety of relations of inherence, just as there are a variety of relations of conjunction (i.e. the inherence-relation has been made parallel to the conjunction-relation, in the argument that 'the category of inherence is an independent category, because it is the ground of the notion of a thing's being at a particular spot' And this will imply that there are many relations of inherence—just as everyone admits plurality of relations of conjunction).

Kumārila says that some give a sixfold division of the *viruddha*, others a fourfold division, others only one kind: *'ṣodhā viruddhatām āhuś caturdhā vaikadhā 'pi vā'* (*Śl Vārt.*, *anumāna*, 96).

He himself gives the sixfold division (i) *dharmasvarūpaviruddha* (ii) *dharmaviśeṣaviruddha* (iii) *dharmisvarūpaviruddha* (iv) *dharmiviśeṣaviruddha* (v) *dharmadharmisvarūpaviruddha* (vi) *dharmadharmiviśeṣaviruddha*.

His examples of (i), (iii), (iv) and (vi) have already been given. The other cases are :—

arthavac chabdarūpam syāt prāksambandhāvadhāraṇāt,
vibhaktimattvāt, paścādvat, svarūpeṇeti cāśrite
asvarūpārthayogas tu pascāc chabdasya dṛśyate
tena prāg api sambandhād asvarūpārthatā bhavet.
(*Śl. Vārt.*, *anumāna*, 98—100).

You argue that a word has meaning even before its relation to other words in a sentence is grasped,—it has meaning as an isolated unit, *svarūpeṇa*. But the reason you give, *vibhaktimattvāt paścādvat*, contradicts this qualification *svarūpeṇa;* for the meaning which the word has in virtue of possessing inflections, as in the case of the word *after* its relation to other words in the sentence has been grasped, would *not* be a *svarūpārtha*. As Pārthasārathi Miśra says *ad. loc.*, the *vyāpti* that is seen is between possession of inflections and the conveying of a meaning other than meaning as an isolated unit,—*svarūpātiriktārtha*[1].

nityam ātmāstitā kaiścid yadā Sautrāntikaṁ prati
sādhyate 'vayavābhāvād vyomavad dvayabādhanam.
(*Śl. Vārt.*, *anumāna* 103-104).

Pārthasārathi Miśra explains: "Space is merely absence of an obstacle (*āvaraṇābhāva*) for the *Sautrāntika*. And 'absence' being *nothing*, space has not even a being (*svarūpa*): much less eternality".—So that absence of parts (*avayavābhāva*), as exemplified in space, contradicts the essence of the minor term (*ātma*, as something real) and the essence of the major term (eternality).

(*iii*) *The doubtful reason* (*saṁdigdha*)

PBh. p.238 l.20 ff. "The reason that is found in the Subject or minor (*anumeye san*), and is common (*sādhāraṇa*) both to that which is homogeneous with and to that which is not homogeneous with the minor (i.e. is found both in *sapakṣas*, XP's, and *vipakṣas*, Xnon-P's), is a 'doubtful' reason because it is the cause of doubt (*saṁdehajanakatvāt*): for example, 'it is a cow, because it has horns' ".

[1]The argument belongs to the controversy of *abhihitānvayavāda versus anvitābhidhānavāda* See *NK* p 231 l. 24, and Faddegon's translation of the passage in his *Vaiśeṣika System* p 492.

This is the *sādhāraṇa* fallacy, which alone Praśastapāda classes as 'doubtful'. He does not subdivide it; but it admits of formal subdivision under four heads, as given in the *Hetucakra-ḍamaru*, or in the *Ślokavārttika;* according as the middle resides (i) in all *sapakṣas* and some *vipakṣas*, (ii) in some *sapakṣas* and all *vipakṣas*, (iii) in some *sapakṣas* and some *vipakṣas*, (iv) in all *sapakṣas* and all *vipakṣas*.

The stock examples, as given in the *Hetucakra* and repeated in the *Ślokavārtika*, are :—

(*i*) Sound is an effect of volition because it is non-eternal.

(*ii*) Sound is a non-effect of volition because it is non-eternal.

(*iii*) Sound is eternal because it is corporeal[1]

(*iv*) Sound is eternal because knowable.

The *Nyāyapraveśa* list of six 'uncertain' i.e. doubtful reasons, is made up of the above four cases of the *sādhāraṇa*, together with (v) the *asādhāraṇa*, i e. a middle which is found neither with *sapakṣas* nor with *vipakṣas*, but only in the *pakṣa*—as 'sound is eternal because audible'. and (vi) the *viruddhāvyabhicārin*, or antinomy.

Praśastapāda will not admit that the *asādhāraṇa* can be a *saṁdehajanaka*, a cause of doubt; and therefore he introduces what seems to have been a novelty in classification, by setting up a fourth class, the *anadhyavasita* or reason which does not lead to a conclusion, to cover the *asādhāraṇa*. He further refuses to admit the *viruddhāvyabhicārin* as a variety of the *saṁdigdha*, suggesting that it is either a case of the *asādhāraṇa* (and so *anadhyavasita*), or else non-existent. Kumārila clearly accepts the threefold classification[2] of the '*saṁśaya-*

[1] or, because incorporeal.

[2] *Śl Vārt*, *anumāna*, 84, *trayaḥ saṁśayahetavaḥ · sat sādhye tadabhāve vā, dvābhyāṁ vyāvṛtta eva ca; dvau viruddhārthasambaddhau yāv ekatraikadeśini.* "There are three doubtful reasons, either a reason found in P and non-P; or a reason excluded from both, or a pair of qualities joined with contradictory qualities, found in one and the same thing".

hetu' as *sādhāraṇa*, *asādhāraṇa*, and *viruddhāvyabhicārin;* but he adds [1] that although some reckon the *viruddhāvyabhicārin* as a separate class (*jātyantara*) others hold that the two reasons taken separately (*aṁśena*) form a case of *sādhāraṇa;* while taken together there is want of connection (*ananvaya*). Pārthasārathi Miśra explains the latter clause to mean that, taken together, the two reasons are a case of *asādhāraṇa*, for the reason that they are not found together in any other instance. This is Praśastapāda's view and Kumārila may be referring to him here

The example given by Kumārila is the antinomy 'Air is perceptible, because it is tangible', and 'Air is imperceptible, because it has no colour'.

(*iv*) *The reason which does not conclude* (*anadhyavasita*)

PBh p.238 l.23. " Some argue that we see doubt arising when there is a falling together in one thing of two contradictory middle terms which have the characters described above (in the *trairūpya*), and that this is therefore another variety of the doubtful reason : as in the case of the two middle terms 'possession of movement' and 'intangibility' taken as proving the corporeality and the incorporeality of the 'mind'. Surely it will be said, this (the *combination* of possession of movement with intangibility) is just a unique (*asādhāraṇa*) quality of 'mind', because the combined qualities do not occur in any other subject : like the two qualities of invisibility and perceptibility[2].—Yes, we reply : and it is for this reason that we shall designate it a case of a reason that does not point to any conclusion at all, an '*anadhyavasita*' reason.

[1] *Śl Vārt.*, *anumāna*, 92-93

[2] Srīdhara explains that although these two qualities taken separately are found in other things as well as qualities, taken together they occur nowhere else except in quality, *NK* p. 242 ll. 1-2.

"But it will be said that in several places[1] in the *Vaiśeṣika-sūtra* ambiguity of experience (*ubhayathā darśanam*) is asserted to be the cause of doubt.—This is not the case: doubt arises from experience of a pair of objects (*viṣayadvaitadarśanāt saṁśayaḥ*): in other words, the cause of the arising of doubt is the experience of a pair of objects."

The question is, what is the distinction between *ubhayathā darśana* and *viṣayadvaitadarśana* in virtue of which the latter alone is held to be the cause of doubt? I think the distinction is clear enough from *VS* II.ii.17, and from the account of doubt which Praśastapāda bases on this *sūtra*. The *sūtra* runs: *sāmānyapratyakṣād viśeṣāpratyakṣād viśeṣasmṛteś ca saṁśayaḥ*—"doubt arises from experiencing a common character, failing to experience distinctive characters, and remembering the distinctive characters". You see an object marked by a certain relative tallness (which is common to a man or a post): you do not experience the distinctive features either of man or post: but you are reminded of both these (contradictory) characterisations by the common character. —The point is that a common feature, *sādhāraṇadharma*, implies a *pair of objects* to which it is common. and Praśastapāda emphasises this in his own definition by the use of a dual—*prasiddhānekaviśeṣayoḥ sādṛśyamātradarśanād ubhayaviśesānusmaraṇād . ubhayāvalambī vimarṣaḥ* (PBh.p.174 l.20).

[1]Śrīdhara (*NK* p 242, 119 and l 23) quotes *VS* II ii 18 and 19 but the interpretation of the whole passage *VS* II ii 17—22 has to be taken together, and Praśastapāda himself partially quotes II ii 22 a little below. It is indubitable that Vātsyāyana on *NS* I i 23 is referring to this passage in *VS*—he partly quotes and partly paraphrases *VS* II. ii 22 at *NBh* p 34 ll 10-11 Faddegon pp 174-5 notes this but his suggestion p. 605 that *VS* II. ii. 22 is a later interpolation taken from Vātsyāyana's discussion seems to be baseless—Praśastapāda's own account of doubt is at pp. 174-5 (*saṁśayanirūpanam*) Śrīdhara *ad loc*, p 176 l 13 quotes *NS* I i 23 remarking that the fivefold classification of doubt given in this *sūtra* of the '*samānatāntrika's*' is covered by the classification which Praśastapāda gives.

Now the so-called 'ambiguity of experience' (*ubhayathā darśanam*) of which the opponent speaks in the case of an *asādhāraṇa dharma* does not admit of this *viṣayadvaitadarśanam*: for the mark of the *asādhāraṇa dharma* is that it is found *nowhere else* except in the subject. You have not experienced *kriyāvattva plus asparśavattva* as connected in one experience with *mūrtatva* and in another experience with *amūrtatva*—there is no *viṣayadvaita* here. And therefore it cannot be brought under the rubric of doubt as laid down in *VS* II.ii.17. —This seems to me to be a real distinction. Whether the antinomy ought to be classed as a case of *asādhāraṇa dharma* is another matter But the opponent has made or accepted the identification. And what Praśastapāda shows now is that to treat the *asādhāraṇa* as homogeneous with the *sādhāraṇa* is a confusion in classification The latter generates doubt because it has been connected with contradictory experiences (*viṣayadvaita*—M has been found with P in *sapakṣas* and with non-P in *vipakṣas*). It is a case of *conflicting evidence*. The *asādhāraṇa* is quite different for it excludes the possibility of experience which could provide evidence for either alternative. It is a case of *absence of evidence*. And complete absence of evidence suggests no view at all, and therefore cannot be said to *generate doubt* There is nothing positive about it—at most it *leaves* us in doubt, as suggesting no conclusion at all (*adhyavasāyaṁ na karoti*).

Audibility does not suggest either that sound is eternal or that it is non-eternal, nor does the possession of smell suggest either that earth is eternal or that it is non-eternal. And, as suggesting neither alternative, such middle terms (i.e. *asādhāraṇa dharma's*) cannot be causes of doubt (*saṁśayahetu* or *saṁdigdha*), but are

simply middles that fail to suggest any conclusion (*anadhyavasita*)[1].

PBh.p.239 l.7. "If the thesis and counter-thesis in the antinomy were equally strong, their mutual contradiction would prevent them from giving rise to conviction: but it would not constitute them a cause of doubt. But as a matter of fact they are not equally strong, because one or other Proposition (*anumeyoddeśa* = either *pratijñā* or *pratijñābhāsa*, according as it is *avirodhi* or *virodhi* pp.133-4) will be sublated by scriptural authority (*āgamabādhita*) · and then it will be a variety of contradicted thesis (i.e. a case of *pratijñābhāsa*)[2]".

Praśastapāda's position is that, no matter how you regard the '*viruddhāvyabhicārin*', the classification of it as a *saṁdigdha hetvābhāsa* will be unjustifiable. You may treat it as a case of the *asādhāraṇa* : but in that case it will come under the head of *anadhyavasita hetvābhāsa*. If there is nothing to choose in favour of one rather than the other of the alternative conclusions the mutual contradiction does not generate doubt but merely leaves you unable to conclude. But as a matter of fact the so-called

[1] Śrīdhara *NK* p 242 l 2 ff. gives the reasoning of those who maintain that the *asādhāraṇa* is a cause of doubt—*saṁśayahetutvam eva vyatirekiṇo hi vipakṣād evaikasmād vyāvṛttir niyatā. tena pakṣe nirṇayahetutvam . asādhāraṇasya tu vyāvṛttir anaikāntikī, vipakṣād iva sapakṣād api tasyāḥ sambhavāt*, etc "A genuine negative reason is excluded only from non-P, while the *asādhāraṇa* is excluded from P as well as non-P So the possession of smell might as well be used to prove earth eternal as to prove it non-eternal. Both conclusions cannot be true by the law of contradiction . and both cannot be false by Excluded Middle. Therefore because of the possession of smell doubt arises as to whether earth is eternal or non-eternal". He cites Kumārila (*Śl. Vārt. anumānā* 88) in support · also the *Nyāyavārttika*

[2] and therefore, of course, is not to be classed as a *saṁdigdhahetvābhāsa*.—Praśastapāda's words are *na ca tayos tulyabalavattvam asti, anyatarasyānumeyoddeśasyāgamabādhitatvād, ayam tu viruddhabheda eva*. See Keith *ILA* p. 141 But what Keith calls 'the contrary pure and simple' must be understood to be, not the *viruddhahetvābhāsa*, but the *virodhi anumeyoddeśa*. i e. a *pratijñābhāsa* In the logic of Praśastapāda's time the *pratijñābhāsa* took the place of what was later treated as a *hetvābhāsa*, viz., the *bādhita*

antinomy will be found to be a case of 'sublated thesis' in respect of one of its alternatives.

PBh. p.239 l.10. "And the middle term which is found in the subject (*anumeya*) but is absent in what is homogeneous with the subject as well as in what is not homogeneous with the subject, being non-proven in either direction[1] is not a ground for a conclusion and is therefore designated the non-concluding reason (*anadhyavasita*); for example, the argument 'every effect is existent even before its origination, because it originates'. This '*asādhāraṇa*' is included under the '*aprasiddho 'napadeśaḥ*[2] (of *Vaiśeṣika Sūtra* III. i. 15)".

"And if it be objected that the *viśeṣa* or *asādhāraṇa dharma* is stated (in *Vaiśeṣika Sūtra* II.ii.21 and 22) to be a cause of doubt (*saṃśayahetu*),—the answer is that this is not the case (*na*), since the *sūtra* has a different meaning (*anyārthatvāt*)[3].

"What you mean is that (on our view) the doubt as regards sound could not arise from experience of its peculiar property (our view being that such experience never generates doubt). And yet the *sūtra*, II. ii. 22, says that doubt to whether sound is substance, quality or action arises *viśeṣasya ubhayathā dṛṣṭatvāt*, i.e. from ambiguous experience of the peculiar property. The solution of this difficulty is that the *viśeṣa* spoken of in the *sūtra* could not be audibility[4] as the peculiar property *of this that or*

[1] *anyatarāsiddha* This term is used elsewhere as the name for one variety of the *asiddha-hetvābhāsa*. But it cannot be taken in this sense here Śrīdhara (*NK* p 244 l. 25) says, apparently in explanation of this, *naikatarapakṣādhyavasāyaṁ karoti*. *anyatarāsiddha* must be taken accordingly in an unusual non-technical sense, as above rendered (*cp.* Keith, *ILA* p. 149 footnote. Bhāsarvajña is perhaps echoing Praśastapāda's use of *anyatarāsiddha* in this connection.)

[2] See above p. 191 for the interpretation of this *sūtra*

[3] The punctuation in the text is wrong. It should be: *nānyārthatvāt. śabde viśeṣadarśanāt saṁśayānutpattir ity ukte*, etc.

[4] *śrāvaṇatva* is Praśastapāda's substitute for the *śrotragrahaṇo yo 'rthaḥ śabdaḥ* of *VS* II. ii. 21.

the other particular substance, quality or action; but on the contrary turns out to be neither more nor less than a *common character* pertaining to all[1]. You may ask on what grounds we say this.

"The answer is given in *Vaiśeṣika Sūtra* II.ii. 22 which says that the possession of a peculiar property (such as audibility is) is not confined to one category alone (e.g. quality), but is found in each one of the three categories of substance, quality and action (so that the argument 'sound is quality because it possesses a peculiar property, viz , audibility, would be open to the objection that the middle term, 'possession of a peculiar property', is ambiguous—*ubhayathādṛṣṭa*—in the sense that it is found both in *sapakṣa's* or *tulyajātīya's*, i e. in other qualities, and also in *vipakṣa's* or *ārthāntarabhūta's*, i e. in substances and actions)[2].

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[1] Śrīdhara *NK* p 245 ll 12—18 elucidates this passage as follows: 'After explaining sound in II. ii 22 as the object of the organ of hearing the *sūtrakāra* says there is a doubt whether sound is substance, quality or action. . The opponent here says 'when you say that this doubt arises with regard to sound which is the object of the organ of hearing, you mean that it is just the fact of being the object of hearing that is the ground of this doubt and the fact of being the object of hearing is the *viśeṣa*, the peculiar property of sound But from the experience of this peculiar property doubt cannot arise For doubt has as its condition the remembrance of both conflicting properties And remembrance does not arise from experience of a peculiar property, an *asādhārana dharma*, because it is never found together with any peculiar property whatever' In reply to this objection of the opponent, the *sūtrakāra* has given this rejoinder which Praśastapāda expresses in the words *nāyam dravyādīnām anyatamasya viśeṣah*, etc "

[2] As Śrīdhara expresses it (*NK* p 246 l 1) "the possession of a *viśeṣa as such* (*viśeṣatvena rūpeṇa*) is neither more nor less than (*eva*) a character common (*sāmānya*) to substances qualities and actions and so in this aspect (*tena rūpeṇa*) it is rightly considered to be a cause of doubt But in its aspect as *asādhārana dharma* it is not a cause of doubt, because it does not call to mind different alternatives". And again l 7 "What does it mean? It means that distinctive characters, *viśeṣa's*, are seen alike in substances, qualities and actions. Now a distinctive character—audibility—is seen in sound Therefore, from its being a distinctive character, a doubt arises—a doubt embracing substance, quality and action But if its *asādhāraṇa* aspect also were a cause of doubt, then there would be the undesirable consequence of doubt arising from the distinctive characters of the six categories themselves, since each of these has its *asādhāraṇa dharma* . and the result would be that doubt would stop nowhere "

"Audibility as such is not cause of doubt. If it were, the undesirable consequence would follow that doubt would arise in the case of the six categories (from their distinctive characters). Therefore it is only from the thought of a common quality that doubt can arise."

SECTION 6 FALLACIES OF 'PROPOSITIONS', AND FALLACIOUS EXEMPLIFICATION

The recognition of these classes of fallacies other than *hetvābhāsa's* or fallacious middle terms appears to be characteristic of the period represented by Praśastapāda and the *Nyāyapraveśa*. The fallacies of the Proposition and of the Example were quite unknown to Vātsyāyana and the early *Nyāya*, and were rejected by Uddyotakara.

The fallacies of the proposition are represented by the *bādhita* class of *hetvābhāsa* in the later schools : while the fallacies of the example may be found in the *asiddha* class as expounded by later logicians (*vyāpyatvāsiddha*). Here, as in other details of logic, Kumārila accepts, with modifications, the teaching of Praśastapāda.

(*i*) *Pratijñābhāsa* *Fallacies of the Proposition*

Praśastapāda, having defined the Proposition as a statement of a *probandum* which does not involve

Faddegon (*Vaiśeṣika System*, p 324) says that the argument of this passage in Praśastapāda's *Bhāṣya* has been misunderstood by Stcherbatsky, but Stcherbatsky's remarks (quoted by Faddegon, p 323) seem to me to give a correct account of the passage, except in his suggestion that the argument here discussed by Praśastapāda, *śabdo guṇah śrāvanatvāt*, might better be expressed *śabda itarebhyo bhidyate srāvanatvāt* for the latter is quite a different argument, and one which Prasastapāda does not consider at all,—it belongs to a later phase of formalism when the controversy as to the *kevalānvayin* and *kevalavyatirekin* had arisen But, as Stcherbatsky rightly points out, "*Praśastapāda ne mentionne ni le kevalānvayin ni le kevalavyatirekin*" The distinction was unknown to the logic of his time. Stcherbatsky's inference that he regarded them as fallacious is therefore out of place. [Keith's statement (*ILA* p 142) that "Praśastapāda appears to admit the truth of the argument 'sound is a quality because it is audible', or 'sound differs from other things because it is audible' ", is a mistake.]

Faddegon translates this passage of the *Bhāṣya* at pp 306-7 of his *Vaiśesika System* but I think he misses the meaning of it, in part

contradiction (*anumeyoddeśo 'virodhi*), proceeds (*PBh*.p. 234 l. 3). "As the result of inserting into the definition the condition 'not involving contradiction', those apparent or fallacious Propositions are excluded which contradict (i) perception, (ii) inference, (iii) what has been accepted[1], (iv) one's own *śāstra*, (v) one's own words"‡.

The *Nyāyapraveśa*[2] gives a ninefold division, composed of these five with four others. The *Ślokavārttika*[3] gives an independent classification.

PBh p. 234 l. 4. "Examples are :—

(i) Fire is cool. This is contradicted by perception.

(ii) Physical space is dense This is contradicted by inference[4].

(iii) Intoxicating liquor is to be drunk by a *Brāhmaṇa*. This is contradicted by scripture[5].

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[1]*abhyupagata.* The meaning is that your position is contradicted by the very authority which—for the purpose of your argument—you are accepting. See note 5 Vidyābhūsaṇa's rendering of the rubric in the *Nyāyapraveśa* which apparently corresponds to this is 'a thesis incompatible with public opinion' See *Fragments from Dinnāga*, Appendix I Sugiura p. 60 translates the corresponding head from the *Hetudvāraśastra* "contrary to the public understanding" the example being "women and money are abominable things", i e a mere paradox.

‡Dinnāga's list from the *Hetudvāraśāstra* as given by Sugiura pp 60-61 very closely agrees.

[2]Vidyābhūsaṇa *HIL.* pp. 290-291=*MSIL* pp. 90—92 Uddyotakara *NV* pp. 116-117 criticises examples given in the *Nyāyapraveśa*, and appears to approve of Praśastapāda's example of class (iii), as contrasted with the *Bauddha* example

[3]*anumānapariccheda*, verses 52—75.

[4]*ghanaṁ ambaram.* Śrīdhara says that the means of knowledge by which *ākāśa* is known establishes it to be eternal and without parts. Therefore the Proposition that physical space or ether is without interstices contradicts the very inference which establishes the existence of the Subject itself, i e of 'ether' *NK* p. 236 l. 22.

[5]*āgamavirodhī* here, but *abhyupagatavirodhī* above. In the *Nyāyapraveśa* this heading is translated 'a thesis incompatible with public opinion', the example given being 'man's head is pure because it is the limb of an inanimate being'.

(iv) Effects are existent before their origination. This, when put forward by a *Vaiśeṣika*, is contradicted by his own *śāstra* " (which maintains *asad utpadyate*, i.e the *asatkār yavāda*, origination of the non-existent. This can be treated as a case of self-contradiction).

(v) " Words do not convey any meaning. This is a self-contradictory statement" (since if it were true this very sentence could not be used to convey a meaning. The example in the *Nyāyapraveśa* is :'My mother is barren')[1].

But as neither *Bauddha* nor (strictly speaking) *Vaiśeṣika* accepts authority or 'credible testimony' as an independent source of knowledge, there would seem to be no place for this class of fallacious proposition in either system But in practice both *Bauddha* and *Vaiśeṣika* accept the authority of scripture, so that the difficulty should not be allowed to have too much weight —Śrīdhara however seems to feel a difficulty, and meets it by characterising this type as *dṛṣṭāntagrāhakapramānavirodha*, contradiction of the source of knowledge from which the reasoner has derived the facts to which he appeals (this characterisation is however too wide, for it would cover the first type also, contradiction of perception). According to his analysis the reasoner appeals to scripture—"the scripture says there is no harm in drinking milk What harm then in drinking wine?"—The answer is that the very same scripture which allows the Brahman to drink milk forbids him to drink wine If you appeal to scripture in the matter of milk-drinking, you must not contradict it (for it is *abhyupagata*, accepted by you) in the matter of wine-drinking. (*NK* pp. 236 last line—237).

Treated thus, this example becomes a case of self-contradiction, like the fourth and fifth types which are opposed by Śrīdhara to the first two types, in which the proposition contradicts, not merely your own tenets or words (which may be false), but a source of valid cognition In the first two types the contradiction proves the falsity of the Proposition : in the last two it is merely a proof of inconsistency. See next note But Śrīdhara does *not* class the third type with the last two, as he ought to do on his own analysis of it which suggests that he thinks that Praśastapāda's third class really *ought* to be treated as a case of *pramānavirodha*, like the first two As a *Naiyāyika*, Śrīdhara would of course treat it so: but as a commentator on Praśastapāda he feels it difficult to do so. See next footnote also.

[1]Śrīdhara suggests the objection that the last two headings might be reduced to the first two, but replies that a *śāstra* (e g. that of the *Bauddhas*) may be based on merely fallacious proofs (*pramāṇābhāsa*), in which case contradiction of the *śāstra* would not be *pramāṇavirodha*, i.e. could not be classed under either of the first two heads. And the same applies to contradicting one's own statement · for one's own statement may

Four additional varieties are mentioned in the *Nyāyapraveśa* :—

(vi) A thesis with an unaccepted minor.

(vii) A thesis with an unaccepted major.

(viii) A thesis with both terms unaccepted *

(ix) A thesis universally accepted, such as 'fire is warm'. Indian logic always insists on the fact that there can be no *sādhya* or *probandum* without *siṣādhayiṣā* or the desire to prove. And there can be no desire to prove truisms.

Kumārila similarly states that inference is inapplicable (i) where the thing is already known to be so, and (2) where the contrary is already known to be the case[1] He goes on to say that any of the six means[2]

be *apramānamūla*, in which case the contradiction of it would not amount to *pramānavirodha*. That is, he regards both these heads as cases of self-contradiction merely

*Vidyābhūṣaṇa's account has here been corrected from Sugiura, p 61 — 'The next four fallacies of the Thesis are not found in Dinna's'' (i e. Diṅnāga's) "work but only in Saṁkara's" (i e in the *Nyāyapraveśa*, which Chinese authority attributes to Śaṁkara Svāmin) "This is one of the very few additions made by later philosophers to Dinna's system It will be remembered that Dinna said · 'The terms used in the Thesis must be accepted by all', . . Upon this principle of Dinna's teaching Śamkara developed the following ·

(vi) If a disputant wishes to prove that God is almighty, and if his opponent questions the very existence of God, then the Thesis is not a fit subject of proof until at least God's existence is admitted by the opponent. Such a Thesis is called a Thesis with an *unaccepted subject*.

(vii) If the predicate of the Thesis is in question, the Thesis is said to be one with an *unaccepted predicate*

(viii) And if both subject and predicate are questioned, then the Thesis is one with *both parts unaccepted*."

These three fallacies are therefore three cases of the fallacy of many questions

[1]*Sl Vārt anumāna*, 56-57 The latter couplet is quoted by Śrīdhara in the present context, *NK*. p. 236 l 10—

vaiparītyaparicchede nāvakāśaḥ parasya tu
mūle tasya hy anutpanne pūrveṇa viṣayo hṛtaḥ.

"Where the opposite is definitely known there is no room for a subsequent or second proof, since its object is sublated by the previous proof before the premises of the latter proof come into being".

[2]i.e. perception, inference, testimony, analogy, presumption, non-existence. See p. 305 below.

of proof can in this way sublate a subsequent attempt at proof.

There are obvious difficulties in the conception of a fallacious Proposition (*pratijñābhāsa*) or fallacious Thesis (*pakṣābhāsa*), as there are in its later equivalent the Sublated Reason (*bādhitahetvābhāsa*, *bādhitaviṣayatva*). Śrīdhara raises the general objection to the conception: "There cannot be sublation of an inseparably connected (*avinābhūtasya*) middle term, because sublation and inseparable connection are mutually contradictory. To this objection we reply that if the 'three characteristics of the middle' are accepted as constituting inseparable connection (*yadi trairūpyam avinābhāvo 'bhimatah*) then there *is* (*asty eva*) sublation of an 'inseparably connected' middle term: for instance there is sublation (by perception) of the argument 'fire is not warm, because it is a product'. But if by saying that there is no sublation of an inseparably connected middle you mean that the 'three characteristics of the middle term' *when the object is not sublated*[1] constitute inseparable connection,—then of course we should agree that there is no sublation of an inseparably connected middle[2]". But this

[1]The reading of the text is *atha bādhitaviṣayatve sati trairūpyam avinābhāvah* but the variant *yathā* for *atha* is noted The variant gives the clue to the true reading, which I think must be *athābadhitaviṣayatve sati*, etc I have rendered in accordance with this conjectural restoration of the text.

[2]*NK* p 236 ll 13—16 Cf p 205 l 7 — *idam anenāvinābhūtam iti jñānam yasya nāsti tam prati dharmini dharmasyānvayavyatirekavatopi liṅgatvam na vidyate*. It seems clear that for Śrīdhara the 'three characteristics of the middle' could not alone, guarantee *avinābhāva* or inseparability of connection.

But how can it be said that, judged merely by the canon of the *trairūpya*, there is 'inseparable connection' between 'being a product' and 'being not-warm' in the argument 'fire is not-warm, because it is a product'?—The answer apparently is that the middle 'being a product' is found present in *sapakṣa's*, i e cool things, such as water and is found absent in *vipakṣa's*, i.e , warm things, such as *atomic* fire-particles (of course it will be strange to maintain that, whereas fire-atoms are warm, fire-composites are cold But then the thesis itself is strange, and the person who maintains it will be driven to strange devices) And this argument fulfils

'*pañcarūpopapannatva*' doctrine of the later schools—that *in addition to* the 'three characteristics' a valid reason must also be characterised by having a subject-matter which is neither counterbalanced (*satpratipakṣa*) nor sublated (*bādhita*)—does not belong to the phase of logical thought represented by Praśastapāda and by the *Nyāya-praveśa*[1].

(*ii*) *Nidarśanābhāsa. Fallacies of Exemplification*

" Exemplification has two forms according as it is through similarity or dissimilarity. Exemplification through similarity consists in showing the constant accompaniment of the general nature of the Mark by the general nature of the *Probandum* or major term (*anumeya*-

the condition of the *trairūpya*, *if the trairūpya is read without the restrictive 'only' in the second and third clauses*. And Śrīdhara may have relied on Uddyotakara's critique of the *trairūpya* (for the present purpose) as proving that the restrictive 'only' cannot be introduced into the *trairūpya* without making nonsense of it.

At any rate I can find no other way of making sense of what Śrīdhara says here. His position only amounts to this after all if your thesis is not inconsistent with facts, the evidence will be good enough to prove it without being required to satisfy the impossibly ideal condition that M is found *only* in *sapakṣa's* (P's) and *never* in *vipakṣa's* (non-P). (Impossibly ideal, because you cannot hope to prove an *only* or a *never* by evidence) If on the other hand your thesis is inconsistent with facts you may (and sometimes can) adduce evidence both positive and negative in support of it · but it will be perfectly worthless, because the thesis is already disproved before you set out to prove it.

The obvious retort to the position is that, if the thesis is already disproved, it is disproved by facts · and these facts will as a matter of fact constitute counter-evidence which will *disprove* the opponent's assumption that his evidence satisfies the ideal conditions of *never* and *only* For though it may be impossible to *prove* an *only* or a *never*, a single contradictory instance is enough to *disprove* either Why not then class what Praśastapāda calls a 'sublated thesis' under the head of *hetvābhāsa*, fallacious middle, either as *viruddha* or as *anaikāntika*? For it is always reducible to one or other of these two heads.

I think Śrīdhara has misunderstood the intention of *pratijñābhāsa*, which was merely intended to put ridiculous propositions out of court without further argument. And this is the only practical way of dealing with nonsense

[1]How completely the later doctrine of *bādhitahetvābhāsa* corresponds to the earlier doctrine of *pratijñābhāsa* will appear from comparison of the *Nyāyaśāra's* sub-division of *bādha* (given by Vidyabhūṣaṇa *HIL* p. 367. cp p 440 for the *Tattvacintāmaṇi's* classification).

sāmānyena liṅgasāmānyasyānuvidhānadarśanam): for example, 'what possesses movement is found to be a substance,—like an arrow'. Exemplification by dissimilarity consists in showing that in the contrary of the *Probandum* there is absence of the Mark: for example, 'what is not substance does not possess movement,—like the universal 'Being''[1].

The six fallacies of similar Exemplification

PBh. p. 247 l. 1. "By this account of Exemplification the fallacious exemplifications are set aside, as, in the argument 'Sound is eternal, because it is incorporeal', the exemplifications:—

What is incorporeal is found to be eternal,—
(1) like an atom (atoms are not incorporeal)
(2) like movement (movement is not eternal)
(3) like a pot (pots are neither incorporeal nor eternal)
(4) like darkness (darkness is nothing)
(5) skylike (a bare example without statement of connection) and
(6) 'what is substance, possesses movement' (an inverted statement of connection).

These six fallacies of exemplification through similarity are designated as—
(1) having the middle non-proven—*liṅgāsiddha*.
(2) having the *probandum* non-proven—*anumeyāsiddha*
(3) having both the middle and the major non-proven—*ubhayāsiddha*
(4) having the substrate non-proven—*āśrayāsiddha*[2]

[1] Translated above. I insert it here in order to supply the connection of thought.

[2] There is an unfortunate repetition of the phraseology used in naming the varieties of the '*asiddha hetvābhāsa*'.

(5) want of connection—*ananugata*

(6) inverted connection—*viparītānugata.*

Fallacious Exemplifications by dissimilarity are—

(7) not excluded middle (*liṅgāvyāvṛtta*)

(8) not excluded major (*anumeyāvyāvṛtta*)

(9) neither middle nor major excluded (*ubhayāvyāvṛtta*)

(10) having an unreal substrate (*āśrayāsiddha*)

(11) failure of exclusion (*avyāvṛtta*).

(12) inverted exclusion (*viparītavyāvṛtta*).

Illustrations are the following :—

'What is non-eternal is found to be corporeal,—

(7) like action (does not exclude the middle, i.e. incorporeal. Action is not an example of the non-incorporeal)

(8) like atoms (does not exclude the major, i e. eternal. Atoms are not an example of the non-eternal)

(9) like ether (excludes neither incorporeal nor eternal, i.e. it is an example neither of the non-incorporeal nor of the non-eternal)

(10) like darkness (the example is not a real thing)

(11) jar-like (bare example, without statement of necessary exclusion of middle, i.e. incorporeal from non-eternal, i e. the negative of the major. The bare example of the jar does not carry with it the truth that all non-eternals are corporeal)

(12) 'what is without motion is not substance' (the required concomitance is that 'what is not substance is without motion').

[Instead of excluding the middle 'possessing motion' from 'non-substance,' the negative of the major, you have excluded the major from the negative of the middle.]

The interesting varieties here are Nos. 5 and 6, and the corresponding Nos. 11 and 12. Nos. 6 and 12 accord with the fact that Praśastapāda (and with him the author of the *Nyāyapraveśa*, who gives a list corresponding except that it omits the *āśrayāsiddha*, Nos. 4 and 10) had fixed the form (*vidhi*) of the *nidarśana* as a 'major premise' Similarly Nos. 5 and 11 indicate the requirement of a *vyāpti* or *avinābhāva*, a necessary connection between the attributes exemplified in the concrete instance or *dṛṣṭānta*[1].

Note on the number of the Fallacies in Buddhist logic

Sugiura (p. 58) states that Śaṁkara Svāmin recognised 33 fallacies,—nine of the thesis, fourteen of the reason, and ten of the example. " But if we consider the combinations of the fallacies of which a syllogism may be guilty, the number is greatly increased. Of this kind the Thesis is said to possess 9216, the Reason 117, the Example 84, in all then 9417 fallacies ". (This appears to be the teaching of Kwei-ke's Great Commentary, not of the *Nyāyapraveśa* itself).

Diṅnāga did not recognise the last four of the fallacies of the Thesis given in the *Nyāyapraveśa*, and

[1]Praśastapāda's *ananugatanidarśanābhāsa* and *avyāvṛttanidarśanābhāsa*, as interpreted by Śrīdhara, consist in failure to *state* the *vyāpti* The corresponding head in the *Nyāyapraveśa* consists in a *failure* of *vyāpti*. Dharmakīrti provides a place for both failure to state the *vyāpti*, and failure in the *vyāpti* itself, under two separate rubrics—*ananvaya* and *apradarśitānvaya*: and this distinction between form and matter is also made by Kumārila, whose list otherwise corresponds with Praśastapāda's Dharmakīrti further increases the *Nyāyapraveśa* list of ten (five and five) *nidarśanābhāsas* to eighteen (nine and nine) by adding three classes where the major, the middle, and both are *doubtful* See *Nyāyabindu* pp 166-7 and Vidyābhūṣaṇa *HIL* pp. 314-5

The *udāharaṇābhāsa* perhaps does not figure in any *Naiyāyika* work except the tenth century *Nyāyasāra* of Bhāsarvajña—a work which deviates from the accepted *Naiyāyika* teachings in other respects also. It gives what is practically identical with Praśastapāda's list of twelve (six and six) · but adds that eight (four and four) others are recognised, in which the major, middle, both, and substrate are *doubtful*.

therefore it would seem that his list of fallacies must have been limited to 29. Sugiura states the principle of division of the fourteen fallacies of the reason (p. 62): "Dinna enumerated fourteen fallacies of the Reason. These he classed into three groups with reference to the phases of the *Hetu*. The first four are those which are defective in the first phase of the *Hetu*, the next six are those which are defective in either the second or the third phase, and the last four are those which are defective in both the second and the third phases". (By the 'phases' of the *Hetu* is meant the three clauses of the *trairūpya*. The *asiddha* breaks clause I, the *aniścita* breaks either II or III, the *viruddha* breaks both II and III). From this it is clear that Diṅnāga recognised the *asiddha*, though it is ignored in the *Hetucakra*. Of the remaining ten fallacious reasons the wheel provides a place for seven which depend on the formal relations of the middle to the *sapaksa* and *vipakṣa* (i.e. roughly speaking, to the major): but only six of these figure in the list of 14 fallacies of the reason. The four not accounted for in the Wheel (other than the four *asiddha*) are the three varieties of *viruddha* where the middle is inconsistent with the minor, with the implications of the minor, and with the implications of the major; and (among the *aniścita*) the antinomic reason or *viruddhāvyabhicārin*.

Sugiura (p. 70) notes that Diṅnāga "enumerates 14 fallacies which may be committed in the course of disproof of a valid Thesis . . . These fourteen fallacies Dinna ascribes to Socmock". 'Socmock' is without doubt Akṣapāda (see Sugiura, p. 21 n. 3), and these fourteen fallacies of disproof (*dūṣaṇābhāsa*) are nothing but an abbreviated list of the 24 *jātis* of *Nyāyasūtra* Bk. V.i., as is quite clear from the account given by Sugiura (pp. 23—26). He adds that the fourteen 'fallacies of refutation' (i.e. *jāti*) are not mentioned in Śaṁkara's *Praveśa-tarka-śāstra* (i.e. in the *Nyāyapraveśa*). This is in accordance

with the practical ignoring of Bk. V of the *Nyāyasūtra* by Indian logicians from the time of Praśastapāda onwards.

SECTION 7. SYLLOGISTIC. THE 'WHEEL OF REASONS', OR THE NINE VALID AND INVALID TYPES OF SYLLOGISM

Diṅnāga in the *Pramāṇasamuccaya*[1] gives a formal scheme of nine valid and invalid types of inference which appears to be the earliest specimen of formal 'syllogistic' in Indian logic[2]. The scheme is a corollary of the second and third clauses of the *trairūpya*[3], that is to say it is a statement of all possible relations in which the reason or middle term may stand to positive examples (*sapakṣas*, XP's) on the one hand, and to negative examples (*vipakṣas*, X non-P's) on the other hand. The middle term may be found in all, some, or none of the positive examples: and again in all, some, or none of the negative examples. The combination of these two sets of possibilities gives rise to the Nine Types :—

I All XP's are M. and All X non-P's are M (i.e. the *hetu* is *sapakṣavipakṣavyāpaka*[4]),

[1]The passage is quoted in full by Vācaspati Miśra in *NVT* p. 198. It will be found in *Fragments from Dinnāga*, pp 29—33.

[2]Praśastapāda makes no reference to this scheme, nor to any other scheme of valid and invalid 'moods' It might seem that he would have referred to this piece of formalism if it had been known to him · and this gives some support to the view which makes Praśastapāda earlier than Diṅnāga

But on the other hand, Praśastapāda does note the *two* valid forms of syllogism—and it may be argued that this implies the kind of formal scheme set out by Dinnāga

[3]The first clause of the *trairūpya—anumeye sattvam*—is ignored in the scheme. that is, the relation of M to S, *pakṣadharmatā*, is ignored, so that what was later called the *asiddha hetvābhāsa*, i.e. the middle which is fallacious because it does not reside in S, finds no place in the scheme. Moreover what appears to be the closing line of this fragment cited by Vācaspati seems to state the principle on which it is ignored—viz , that true and fallacious reasons in general are alike '*pakṣadharma*', i e. reside in S.

[4]The convenient Sanskrit formulae for the various types of syllogism and paralogism are those used by Uddyotakara · except that I have substituted the more familiar '*sapakṣa*' for Uddyotakara's '*tajjātiya*', i.e. *sādhyajātiya*,

e.g. 'Sound is eternal because an object of knowledge'.—But all the non-eternal things that can be adduced as examples, as well as all the eternal things, are 'objects of knowledge'. Therefore the argument is *inconclusive* (*aniścita, saṁdigdha*. It belongs to the *sādhāraṇa* or 'too general' variety of the *savyabhicāra* or *anaikantika hetvābhāsa*).

II. All XP's are M, and No X non-P's are M (*sapakṣavyāpaka vipakṣāvṛtti*), e.g. 'Sound is non-eternal because a product'. VALID.

III. All XP's are M, and *some* X non-P's are M (*sapakṣavyāpaka vipakṣaikadeśavṛtti*), e.g. 'Sound is an effect of volition, because non-eternal' —But some things which are *not* effects of volition are non-eternal, e.g. lightning. *Inconclusive* (*aniścita*).

IV. No XP's are M, and All X non-P's are M (*sapakṣāvṛtti vipakṣavyāpaka*), e g. 'Sound is eternal because produced'. But there is no example of an eternal thing that is produced; and all examples of non-eternal things are products. *Contradictory*, since the evidence proves the contrary conclusion in the valid type No. II. It is a breach of *both* the second *and* the third clauses of the *trairūpya*.

V. No XP's are M, and No X non-P's are M (*sapakṣavipakṣāvṛtti*), e.g. 'Sound is non-eternal, because audible'. There are no examples other than S in which M is

present. The evidence is confined to cases of non-M; and although this is found in all examples of non-P (so that the third clause of the *trairūpya* is satisfied), it is also found in all cases of P, so that the second canon is not satisfied[1].

As satisfying only one of the two latter canons the argument is *inconclusive* (*aniścita*). The *asādhāraṇa* or 'too restricted' variety of the *savyabhicāra hetvābhāsa*, according to the later classification. But Praśastapāda classes the *asādhāraṇa* as *anadhyavasita*, a reason based on no evidence at all, and refuses it the name of *aniścita—saṁdigdha*—a reason based on conflicting evidence.

VI. No XP's are M, and some X non-P's are M (*sapakṣāvṛtti vipakṣaikadeśavṛtti*), e g. 'Sound is eternal, because an effect of volition' —But there are no examples of eternal things which are effects of volition; and, on the other hand, some (though not all) non-eternals are effects of volition, e.g a pot is so, though lightning is not. The argument breaks *both* the second *and* the third Canons . and it is *Contradictory* since

[1]or, as Uddyotakara would put the objection to this argument, the negative evidence is conflicting—*vaidharmyaṁ vyabhicarati*, i e non-M is P as well as non-P For Uddyotakara holds that in this particular case (i.e where the *hetu* is an *asādhārana dharma*, so that no positive evidence is available) an argument which satisfies the third canon can be valid without satisfying the second, provided the negative evidence all points in one direction, i.e provided that all the non-M's are non P. Under this condition the *asādhārana dharma* can be a *valid* reason (belonging to the type which he calls *avīta* or *vyatirekin*), and which the later schools recognise as *kevalavyatirekin*. In his phraseology the *hetu* need not always be a *trilakṣaṇahetu*, i.e it need not always satisfy the *three* canons of syllogism for the *kevalavyatirekin* is valid although it is only *dvilakṣana* or *dvipadayukta*, i.e satisfies only *two* canons, viz , the first and the third

the evidence proves the contrary conclusion in the valid type No. VIII.

VII. Some XP's are M, and All X non-P's are M. (*sapakṣaikadeśavṛtti vipakṣavyāpaka*), e.g. 'Sound not an effect of effort, because non-eternal'. It is true that some things which are not effects of effort are non-eternal, e.g. lightning, so that the second canon is satisfied : but on the other hand all things that *are* effects of volition *are* non-eternal, e.g. a pot (all X non-P's are M), so that the argument breaks the third canon which says that all X non-P's must be non-M. It is *inconclusive*.

Note.—It is not classed as contradictory, because the evidence will not prove the contrary conclusion, but will only lead to the equally inconclusive inference of the contrary in type No III This amounts to saying that the argument is not classed as contradictory, because it does not break two canons but only one.

VIII. Some XP's are M, and No X non-P is M (*sapakṣaikadeśavṛtti vipakṣāvṛtti*), e.g. 'Sound is non-eternal, because an effect of volition'.

VALID. For some, though not all, non-eternal things, e.g. a pot, are effects of volition; while no eternal things are effects of volition, e.g. ether. So that both canons are satisfied. It differs from the other valid type, No. II, because there the reason was *sapakṣavyāpaka*, resident in *all* XP's. But it is not necessary to the validity of an argument that M should reside in *all* XP's : or, as we should put it, it is not necessary that 'all P should be M'—all we need is that 'all M should be P'.

IX. Some XP's are M, and some X non-P's are M (*sapakṣavipakṣaikadeśavṛtti*), e.g. 'Sound is eternal because it is corporeal'—But although some eternal things are corporeal, e.g. atoms (others, e.g. ether, not being so), it is not the case that *no* non-eternal things are corporeal—for, although some non-eternal things are not corporeal, e.g. action, other non-eternal things *are* corporeal, e.g. a pot. That is, though the argument satisfies the second canon, it breaks the third. It is therefore *inconclusive*—differing from No VII only in this respect that the equally inconclusive inference of the contrary would be in this same type and not in a different type

To sum up this ' Wheel of Reasons '. It gives (1) two types which are *valid* as satisfying *both* the second and the third ' canons ' · (2) two types which are *contradictory* as satisfying *neither* canon and so admitting proof of the contrary in one or other of the two valid types : (3) five types which are *inconclusive* as satisfying *only one* of the two latter canons. Four of these inconclusive syllogisms satisfy the second canon, i.e. they argue from positive evidence. The fifth—the *asādhāraṇa* or too restricted reason—*cannot* satisfy the positive canon because from the nature of the case there is no positive evidence available in favour of either alternative. From the nature of the case, again, it *cannot help* satisfying the negative canon—S being the only M, there cannot be any X non-P which is M. But (if there are any XP's adducible[1]) it will be equally true that there cannot

[1]This is Uddyotakara's proviso Dinnāga makes no proviso and so treats *all* arguments which satisfy only the third canon as invalid. See last note, and page 241 below.

be any XP's which are M—so that the negative evidence will point in the direction of both alternatives equally, and the argument will be inconclusive.

The salient difference between this Wheel of Reasons and the *Barbara Celarent* of western formalism is that the latter starts from the major premise and ignores the evidence for it; while the former starts from the evidence and formulates the types of syllogism as determined by the kinds of evidence which may be adduced in support of the conclusion. In other words the Indian logician is concerned with the relation of M to *sapakṣas* and *vipakṣas*, XP's and X non-P's, while the western schoolman deals with the relations of M to an abstract P. The 'example' therefore is not an unfortunate excrescence on the Indian syllogism, but essential to it, at least so long as it preserved its original character. When the conception of a '*vyāpti*' of M by an abstract P begins to overshadow the 'Exemplification' (*nidarśana*, *udāharaṇa*), the distinction between the Indian and the Aristotelian syllogisms begins to be blurred: for the *udāharaṇa* tends then to assume the nature of a 'major premise', and the example begins to look like an excrescence: and there is even the commencement of a development, out of the notions of *vyāpya* and *vyāpaka*, of something that might have become a quantitative logic.

The 'form' of the nidarśana, and the notions of vyāpya and vyāpaka.

It may have been Kumārila who developed on these lines the implications of the '*vidhi*' or 'form' laid down in the logic of Praśastapāda's age for the *nidarśana*. Kumārila[1] insists that the object of the example is to convey 'the pervasion of the middle by the major term' (*vyāptim gamakasya gamyena*—*NRA* on 107): and that this 'pervasion' can only be conveyed by

[1] *Śl. Vārt.*, *anumāna*, 107—111

a definite order of the terms (*racanāviśeṣa*—*NRA*), the middle being the subject (*uddeśya*) and the major the predicate. The subject is the *vyāpya* or pervaded while the predicate (major term) is the *vyāpaka* or pervader. The mark of the subject is that the relative ' *yat* ' is attached to it, and that it is stated first. The mark of the predicate is that the correlative ' *tat* ' is used with it, and the particle *eva*. *Eva* by its restrictive force, being attached to the predicate or major term, ' distributes ' the subject or middle term. And thus we have what is equivalent to our ' All M is P ' as the necessary form of the *nidarśana*,—which can now fairly be called a ' major premise ' The quantitative implications in the notions of *vyāpya* and *vyāpaka* are clearly set out by Kumārila :

yo yasya deśakālābhyām samo nyūno ' pi vā bhavet
sa vyāpyo, vyāpakas tasya samo vā 'bhyadhiko' pi vā,

tena vyāpye gṛhīte 'rthe vyāpakas tasya gṛhyate
na hy anyathā bhavaty eṣā vyāpyavyāpakatā tayoḥ.

vyāpakatvagṛhītas tu vyāpyo yadyapi vastutaḥ
ādhikye 'py aviruddhatvād vyāpyam na pratipādayet.

(*Śl. Vārt., anumāna,* 5—7).

" The pervaded is what has equal or less extension in space and time · its pervader is what has equal or more extension. This means that when the pervaded thing is apprehended, its pervader is apprehended :[1] for not otherwise would the relation of pervaded and pervader hold between the two And although the pervaded be (sometimes) grasped as pervading (its pervader), in as much as in reality there is not the contradiction [which arises when the " pervader" is also actually greater in extension],—still, it would not cause the pervaded to be inferred ".

[1] i e , we can infer from M to P, but not from P to M If S is M, then it is P : but if S is P, it is not necessarily M.

The last couplet is difficult, but may be interpreted to mean that though sometimes M may be convertible with P (the proposition M is P being equipollent, so that there is no contradiction in saying that all P is M, as there would be in case P overlapped M in extension—*ādhikye*), still, when we *do* thus argue from P to M, "P" is no longer the *vyāpaka* or major term, nor can we be said to argue from "*vyāpaka*" to the "*vyāpya;*" from the "major" to the "middle". P is now our *vyāpya*, or middle, and we argue *from* it to M as our major, or *vyāpaka*[1].—This last couplet is quoted by Śrīdhara[2] in dealing with Praśastapāda's account of the *viparītānugata-nidarśanābhāsa*). "In the argument 'wind is substance because it possesses movement, the possession of movement is the pervaded and the being substance is the pervader. And a universal connection or 'pervasion' (*vyāpti*) is restricted to what is pervaded, solely (*yac ca vyāpyam tadekaniyatā vyaptiḥ*), and does not, like the relation of conjunction or contact (*saṁyoga*), attach to both terms; for the reason that the pervader overlaps the pervaded And even where two terms such as 'being a product' and 'being non-eternal' have mutual universal connection or are equipollent (*samavyāptika*), so that the pervaded is also pervader, even here the universal connection refers to a term *in the aspect of pervaded*, and not in the aspect of pervader: because the latter aspect *may* also belong to a term which is wider in extension. This the teacher (*guru*, i e. Kumārila) points out in the couplet *vyāpakatvagṛhītas tu etc.*"[3]

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[1] i e, M is P, S is P, S is M. There is no contradiction because P is not as a matter of fact greater in extension than M, in the case supposed —But then P becomes the real '*vyāpya*' That is to say the true form of this argument is P is M, S is P, ' S is M. As we should put it, it is formally invalid in the Second Figure

[2] *NK* p 248 l. 9 The second line is quoted here in the form *ādhikye 'pi viruddhatvāt*, etc.

[3] *NK* p 248 ll. 4—9 It is perhaps surprising that Indian Logic never developed the notion of *vyāpyavyāpakatva* into the quasi-mathematical analysis of the relation of terms in extension which constitutes western

SECTION 8. SYLLOGISTIC (CONTD.) THE PURELY POSITIVE AND PURELY NEGATIVE TYPES OF SYLLOGISM

Uddyotakara developed this formal scheme (1) by drawing the important distinction, which Dinnāga failed to draw, between the case in which *there is no* XP, or X non-P (*avidyamāna-sapakṣa, avidyamānavipakṣa*) and the case in which the reason is not found in an *existent* XP, or X non-P (*sapakṣāvṛtti, vipakṣāvṛtti*) · and (2) by taking *pakṣadharmatā*, the relation of M to S, into account. The former distinction adds seven other possible types to the nine recognised by Dinnāga three in which there is no X non-P, while the reason is present in all, some, or none, of the existent XP's : three in which there is no XP, while the reason is present in all, some, or none, of the existent X non-P's : and one in which there is neither any XP nor any X non-P. This gives a total of sixteen types.

But the insistence on taking into account the relation of M to S results in the multiplication of this total by three : for this relation also assumes three forms, according as M resides in all, or some, or none, of the Subject (*sādhyavyāpaka, sādhyaikadeśavṛtti, sādhyāvṛtti*). The total of types of syllogism and paralogism thus reaches forty-eight[1]. But as all types in which M resides only

"formal" logic Indian formalism in fact seems to break off abruptly at the point at which western formulation begins,—perhaps by a fortunate instinct

The *Note on the Indian Syllogism* in *Mind* xxxiii p 398 attempts to appreciate the *trairūpya* formulation of syllogistic types by way of comparison with western formalism I do not believe that any really important inference is the thing which it is represented to be either by the Indian attempt to reduce it to an affair of examples, or by the western attempt to treat it as an application of the *Dictum de Omni et Nullo* But—if formal logic is admitted to have a certain methodological value—I think that it is as good a mental discipline to turn the wheel of the reasons as to plough the sands of *Barbara Celarent*. The study of either logic is almost a necessary introduction to the philosophical literature of either civilisation.

[1]Disregarding a variety of ways of sub-dividing the main divisions which give rise to endless types. *NV* p. 170 l. 17.

partially, or not at all, in S, are *asiddha*[1], only the first sixteen need be taken into account. The two latter sets of sixteen merely repeat the first sixteen types, with the addition of what we should call a false minor premise. Uddyotakara's contention as against the Buddhists is that they are wrong in holding that only a reason which satisfies all three 'Canons' (a *trilakṣaṇahetu*) is valid: because it is necessary to recognise the validity of the purely negative syllogism (*kevalavyatirekin*), which does not satisfy the second Canon and is therefore *dvipadayukta* or characterised only by two clauses of the *trairūpya;* and because the examples of the two valid types given in the Wheel of Reasons are as a matter of fact of the purely positive type (*kevalānvayin*) *for the Buddhist*, who does not admit that there is anything eternal (*anabhyupagata-nityatvapakṣa*)[2]. It will then be necessary to recognise

[1]The rejection of the sixteen *sādhyaikadeśavṛtti* as '*asiddha*' does not conflict with the Aristotelian recognition of inference from a minor premise in which S is undistributed to a particular conclusion For the 'some S' of the conclusion *is* the Indian logician's *sādhya*, and if the inference is to be valid the *whole* of this 'some S' must have been referred to in the premise

In other words, the M, in a proposition connecting M with *some* S is still *sādhyavyāpaka*, resident in the *whole* of that (i e a particular part of S) with which its connection is asserted, if the proposition is a true one The *subject* of particular propositions is in this sense as much 'distributed' as the subject of universal propositions Indian logic knows nothing of our distinction of statements as particular and universal—a distinction which, as used in our formal logic, is certainly without logical justification

Cp Sugiura pp 52-53 He points out that the Indian logician does not recognise the particular proposition, and normally states the "E" prop (No S is P) in "A" form (all S is non-P), and therefore presents his thesis in "A" form always From this he deduces the absence of 'moods' and 'figures' in Indian logic But I think there are traces of the 2nd and 4th figures,—though not of the 3rd

[2]The two arguments referred to are Nos II and VIII—'Sound is non-eternal, because a product', and 'Sound is non-eternal because an effect of volition'. There being on the Buddhist view nothing eternal which could be quoted as negative evidence, both these reasons would be classed as purely positive by the Buddhist, *if he were consistent* And yet he admits their validity.

not only *two* valid types, but five,[1] viz., two based on both positive and negative evidence *(anvayavyatirekin)*, two based only on positive evidence (*anvayināv eva = kevalānvayinau*), and one based on negative evidence only (*vyatirekin—kevalavyatirekin*).

Of the seven types added by Uddyotakara to the nine of the Wheel of Reasons (Nos. X—XVI), the first three are purely positive (*avidyamānavipakṣa*), the second three are purely negative (*avidyamānasapakṣa*), and the last is neither positive nor negative—i.e. no evidence at all is adducible (*avidyamānasapakṣavipakṣa*). They have the characteristics shown in the following tables :—

Table of Nos. 10—12 in Uddyotakara's list of sādhya-vyāpaka.

No	Rubric and Example.	Remarks.
10	*sādhyatājjatīya-vyāpaka avidyamānavipakṣa.* *anityaḥ śabda utpattidharmakatvāt* (Uddyotakara notes that the example is given from the point of view of one who holds that there is nothing eternal The example= No II of the *Hetucakra-ḍamaru* Uddyotakara's point in placing it here, as well as at his No. 8=*HCḌ* No. II, is to indicate the inconsistency of the *Bauddha*)	The *kevalānvayin* accepted as valid by the subsequent *Nyāya* school, e.g. the pot is nameable because knowable. (If we took ' everything ' as the minor here, the argument would fall under No. 16 below) P and M are both infinite in extension while S is of less extension Rubric : All S is M. All XP is M. There are no X non-P's

[1] *NV* p 167 ll 3—6 *ta ete pakṣavyāpakāḥ sodaśa esām pañca hetavah, śeṣā hetvābhāsāh anvayavyatirekiṇau dvau vipakṣāvṛttī tṛtīyanavamau; ekāntavādinonvayināv eva daśamaikādaśau, vyatirekī pancadaśa iti*

"These are the sixteen types in which M resides in the whole of S. Five of them are valid reasons, the rest fallacies : the valid reasons are :— two positive-negative, in which M is not found in X non-P, namely, the third and ninth in the above list, for the person who maintains that there is only one class of things, viz., non-eternal things, the tenth and eleventh are purely positive, the fifteenth is purely negative".

(The positive-negative reasons are described as *vipakṣāvṛtti* to distinguish them from the fallacious positive-negative reasons, which are either *vipakṣaikadeśavṛtti or vipakṣavyāpaka*)

No	Rubric and Example	Remarks
11	*sadhyavyapaka tajjātīyaika deśavṛtti avidyamānavipakṣa anityah śabdo bahyendriya pratyakṣatvat* (This is the same example as that given as No 9=HCD No VIII It is given at No 9 in a fuller form—*samanyaviśeṣavato smad adibahyakaranapratyakṣat vat* Had the *Bauddha* been consistent he would have put his second example of a valid *hetu* here as a second form of *kevalānvayin*)	Another form of *kevalanvayin* —valid if No 10 is valid (?). I have not met with an example from the *Naiyayika* standpoint but an example would be The pot is name able because visible P is infinite in extension but M is of less extension than P S again is of less extension than M, otherwise the rubric would be that of No 12 Rubric All S is M some XP is M There are no X non P s
12	*sadhyavyapaka tajjatiyavrtti avidyamanavipakṣa anityah sabdah śravanatvat* (again *kevalanvayin* from the *Bauddha* point of view only)	A third form of *kevalanvayin* only differing from the *asa dharana* fallacy in that the rubric of the latter has *vipakṣavrtti* in place of *avidyamanavipakṣa* That is to say it is an *asadharana* with an infinite major term P is infinite in extension while S and M which coincide in extension are less than P in extension

Table of Nos 13—16 in Uddyotakara's list of *sādhya-vyāpaka*

No	Rubric and Example	Remarks
13	*sadhyavyapaka avidyama nasajatiya vipakṣavyapaka Nityah sabda utpattidharma katvat* (This is the example of one of the *viruddhahetus* given in *HCD* viz, No IV and by Uddyotakara in his corresponding No 4 It is given here again to indicate that from the *Bauddha* point of view this is its proper rubric—since on their view *all* things are *utpattidharmaka* and nothing is eternal)	This is in form *kevalavyati rekin*, but obviously invalid as residing in the *vipakṣa* Rubric All S is M There are no XP s All X non P s are M (a single instance X non P M is of course fatal)

No.	Rubric and Example	Remarks
14	*sādhyavyāpaka avidyamānasajātīya vipakṣaikadeśavṛtti nityaḥ śabdo bāhyendriyapratyakṣatvāt.* (comment as at 13, *mutatis mutandis* The example = *HCD* No VI, and Uddyotakara's No. 5)	Remarks as at 13. Rubric All S is M There are no XP's Some X non-P's are M (though some are not M)
15	*sādhyavyāpaka avidyamānasajātīya vipakṣāvṛtti.* *Nedaṁ nirātmakaṁ jīvac charīram anindriyādhiṣṭhānatvaprasaṅgāt* (This example is of course given from Uddyotakara's own standpoint i.e he accepts it as valid)	This is the *avītahetu* accepted by Uddyotakara It is *asādhārana* and at the same time *kevalavyatirekin.* It is valid because '*vaidharmyam na vyabhicarati*' i e all three terms coincide in extension. Rubric All S is M There are no XP's No X non-P is M
16	*pakṣavyāpaka avidyamānasapakṣavipakṣa ṣarvaṁ nityam prameyatvāt*	The *anupasaṁhārin* See below. S, M and P all unlimited in extension All S is M, but there are no XP's nor X non-P's.

(a) The Purely Positive types (anvayin, kevalānvayin)

There are several passages[1] in which Uddyotakara seems to say that two of the three purely positive

[1]Besides the passage at *NV* p 167 (cited in the last footnote) see p 131 l. 18 which deals with a scheme (apparently attributed to Dinnāga) of seven types of reasons—a *saptikā* "*Saptikāsambhave ṣaṭpratiṣedhād ekadvipadaparyudāsena trilakṣano hetur iti tad apy ayuktam, dvipadalakṣanayor hetutvāt . . . dvilakṣaṇayuktayor hetutvād iti—anabhyupagatanitya pakṣasya kṛtakatvād ity ayam dvābhyām lakṣanābhyām yujyate, prayatnānantarīyakatvād iti cānayor hetubhāvo na syāt* " "The view which recognises seven types and by rejecting six of them as breaking one or two clauses of the *trairūpya* reaches the conception of the 'reason with three

types are valid arguments. And yet examination of these passages discloses the fact that he never gives an example of these types which he would himself consider as really belonging to them : the arguments given as illustrations being in every case arguments which are really of the 'positive-negative' (*anvayavyatirekin*) type, but which *would be* ' purely positive ' for the Buddhist, if he were consistent. Moreover, the argument for their validity in every case takes the form of an *argumentum ad hominem*.

' *Either* the two arguments which the Buddhist gives as illustrations of valid syllogisms are not valid, *or else* he must admit that the purely positive type is a valid type of syllogism.' There seems to be no passage in which Uddyotakara definitely commits himself to the view that the *kevalānvayin* is a valid type : though this subsequently became the accepted view of the *Naiyāyika* school. Vācaspati Miśra says that an example, from Uddyotakara's own point of view, of the purely positive type would be ' differences are nameable, because they are knowable, like universals'[1]. He argues that absence of negative instances does not deprive a middle term of its cogency · for this cogency does not depend simply on the negative concomitance 'All X non-P is non-M'—if

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characters', is wrong because two middles which have only two characters are true reasons, viz , the middle 'being a product' is endowed with (only) two characters for the person who does not admit the existence of any eternal subject; and so is the middle 'being an effect of volition' · and so these two middles would not be valid reasons ''

The passage at *NV* p. 59 merely repeats this Passages at p 48 and again at p 51 suggest that the *trividham anumānam* of *NS* I. i 5 may mean *anvayin*, *vyatirekin*, and *anvayavyatirekin* This looks as if Uddyotakara himself accepts all these three as valid. But again he fails to give an example of the first class which is really *kevalānvayin*, and again asserts its validity only conditionally—*yathā sarvanityatvavādinām anityaḥ śabdaḥ kṛtakatvād ity asya hi vipakṣo nāsti.*

[1]*NVT* p. 115 l. 21 (on *NV* p. 48 l 12) The example he gives has the merit of not being a mere truism, like the stock example 'the pot is nameable because knowable'. There is an obvious difficulty about naming a *viśeṣa* : for a name universalises, expressing unity in difference. *Viśeṣa* here must mean the *category* so named.

it did the ' too restricted ' (*asādhāraṇa*) middle would be a valid reason—; it depends on its being endowed with essential relationship to the thing to be proved (*svasādhyena saha svābhāvikasambandhaśālitā*); and the fact of its being so endowed can be known by a purely positive concomitance provided it be unconditioned (*anvayamātreṇāpy upādhirahitena*); just as it can be known by the combined positive-negative concomitance. And the negative concomitance can (in this case) be dispensed with. But where negative instances, X non-P's, exist, the negative concomitance has to be taken into account, to set aside the doubt as to M's residence in X non-P's[1].

The question of course remains—How, on a view of inference which makes it essentially an affair of examples, is it possible to be sure that a concomitance is ' unconditioned ', in the absence of negative corroborative evidence? The ' modern ' school has expended much ingenuity in the search for a definition of *vyāpti*, universal concomitance, which shall cover the case of the ' purely positive ' inference. Gaṅgeśa in the *Tattvacintāmaṇi*

[1] *NVT* p. 115 ll. 15—20 The passage dealing with the purely positive inference extends from p 114 l. 22 to p 115 l. 24. The earlier part of it deals with the suggestion that if we admit that in the absence of negative examples there is no negative concomitance 'all X non-P's are non-M', this amounts to the admission that M *does* reside in X non-P—because the denial of a denial is the affirmation of the thing first denied —The answer is that it is absurd to suppose the *presence* of M in a mere 'indesignate' or non-entity (*nirupākhya*) like non-P which cannot even serve as a *locus* for the *absence* of M. When a dying man cannot even drink water sensible people do not suggest that he might take gruel! The principle that denial of denial is affirmation is true only if the original denial is a denial of *something*. But here there *were* no X non-P's in which the presence of M could be denied. For it has been truly said that it takes two positive entities to make a negation (*sadbhyām abhāvo nirūpyate, naikena satā*), i.e. M and X non-P must both *exist* before it is possible to *deny* that M exists in X non-P.

The western scholastic feels the need of this sound principle for the limitation of 'infinite terms' in other connections, as for example when he

reviews a series of such definitions and rejects them all on the ground that they involve, explicitly or implicitly, reference to a *vipakṣa*, X non-P, in which M is absent, and thus exclude the 'purely positive' inference[1].

Difficulties also arose in the attempt to draw a distinction between the purely positive inference, which was accepted as valid, and certain inferences which come under the rubric *avidyamānasapakṣavipakṣa* (No. 16 of the Tables above), i e. an argument of which the minor term is 'everything' and in which therefore the major must also be found in everything, so that there could be no negative instance[2]. As there can be no positive instance *sapakṣa*, either, since *everything* is the *pakṣa*, it seems clear that such arguments must be regarded as invalid on the view which makes inference an affair of examples. For in such arguments no examples, positive or negative, are forthcoming.—And yet it seems obvious that if we can validly argue that 'the pot is nameable because knowable', we could just as well argue that '*everything* is nameable because knowable'.

deals with the process of 'inversion' by which All S is P yields the sometimes absurd implication that some non-S is non-P. He would hardly infer that since all that can be known can be named, therefore some things that are unknowable are unnameable And yet he would probably not hesitate to 'contrapose' this proposition into the form 'No unnameables are knowable'—which is equally objectionable to Vācaspati's principle.

[1]See Vidyābhūṣaṇa *HIL* pp. 421—425.

[2]See Keith *ILA* pp. 145-146 and 118—121 He says that the difference between 'all can be named because it can be known' and Uddyotakara's No. 16 'all is eternal (or non-eternal) because it can be known', is that in the former "there is a real ground of connection between naming and knowledge . . . and the test of reasoning in the school is always correspondence with reality". This is true but the question remains how this correspondence with realty is guaranteed on the basis of '*simple enumeration*'—the absence of negative evidence making the '*method of difference*' inapplicable

There were some who were driven by the logic of their own first principles into admitting the validity of 'the pot is nameable because knowable', while denying the validity of '*all* is nameable because knowable': on the ground that in the former case positive evidence (*sapakṣas*) at least is available; while in the latter case no evidence at all is available, the unlimited nature of the *pakṣa* excluding the possibility of quoting examples not included in the *pakṣa* itself and to quote the *pakṣa* itself as an example of course begs the question.—It was in fact impossible to defend the argument 'all is nameable because knowable', from the point of view of the logic of *sapakṣa-vipakṣa*: except by the desperate device of allowing one or other of the particulars which constitute the *pakṣa* to figure also in the capacity of *sapakṣa*[1].

(b) *The Purely Negative Type* (*vyatirekin, avīta hetu*[2], *kevalavyatirekin*)

If there is room for doubt as to Uddyotakara's attitude towards the purely positive inference, he makes up for it by an unequivocal defence of the validity of the

[1]The difficulty is exactly that which Mill found in *all* syllogisms, as formulated by western logic. It was avoided in the Indian formulation, so far as that argues from *sapakṣas* to *pakṣa*, i e so far as it is an affair of examples. But the Indian formula goes bankrupt when there *are* no examples, the only 'evidence' for the conclusion being the *pakṣa* itself. The truth is that argument from examples—or, what amounts to that, from a generalisation from examples—so far from being the type of all inference, is a comparatively rare and unimportant way of reasoning; and there is nothing objectionable in finding the evidence for the conclusion in the '*pakṣa*' itself. This was recognised in the doctrine of *antarvyāpti*. See *Nyāyāvatara*, l. 20

[2]For *vīta* and *avīta* see *NV* p. 126 l. 8. and Keith *ILA* p. 90. The two words are usually translated 'direct' and 'indirect' and the latter rendering corresponds with the fact that Uddyotakara always expresses the negative argument (*vyatirekin*, which for him always means *kevalavyatirekin* or *avīta*) in the indirect form of an argument from the undesirable consequences (*prasanga*) of the opposite thesis, e.g. *na nirātmakam idaṁ jīvac charīram, aprāṇādimattvaprasangāt*, 'the living organism is not without a soul, because if it were it would follow that it should be without vital functions. But the precise meaning of *vīta* in this connection would seem to

purely negative type[1]. (No. 15 of the Tables above.) In an argument of this type, since there *are* no cases of P (other than S) by definition, and since M does not reside in the cases of non-P (for if it did the argument would be a fallacy as violating the third canon—see Nos. 13 and 14), it follows that the middle term is *restricted* to the minor. In other words it is *asādhāraṇa.*

Thus the property of possessing vital functions is a peculiar property of the living organism. But it is admitted that a peculiar property of the Subject is a fallacious middle term, designated the 'too restricted reason' (*asādhāraṇahetvābhāsa*), in such an argument as 'sound is eternal because the object of hearing'. Must it not then be considered fallacious also in the (supposedly valid) 'purely negative' argument 'the living organism possesses a soul because it possesses vital functions'? If not, what differentiates the purely negative type from fallacious uses of a middle term which is restricted to existence in S, the subject of the inference?—Uddyotakara's answer is that the negative reason (*vaidharmyahetu*) is indeed a 'restricted' quality (*asādhāraṇa*); but it is a restricted quality the opposite of which (non-M) is found only in non-P's, and not in P's also,—*vaidharmyaṁ na vyabhicarati.*

The condition of validity, whether of a positive or of a negative argument, is not the mere concomitance of M and P(in the former case) nor of non-M and non-P in the latter case; but, in either case, the *avyabhicāritva* of the concomitance, i.e. the fact that M is not found with

be that the *hetu* or middle term 'goes away from' the *pakṣa* or minor (*vividhena prakāreṇa itah . . . pakṣavyāpakatve sati, sapakṣavyāptyā 'vyāptyā ca* *NVT* pp. 192-3) The *avīta hetu* is consequently a *hetu* formed by an *asādhāraṇa dharma*, i.e by a quality which does not 'go away from' the *pakṣa* into *sapakṣas*, but is found in the *pakṣa* only.

[1] *NV* pp 126-127.

non-P in the former case, and the fact that non-M (the *vaidharmya*) is not found with P in the latter case. Now in the case of the 'too restricted' fallacious reason non-M *is* found with P as well as with non-P: that is, among things which are *not* objects of hearing, some are eternal, but some are non-eternal: so that the argument 'sound is eternal (or non-eternal) because the object of hearing' is invalid. But in the case of the 'purely negative' argument 'the organism has a soul because possessed of vital functions', non-M is *only* found with X non-P—for the simple reason that there *are no* XP's, S being the only P; and M is restricted to S. That is, the organism, S, to which vital functions, M, are restricted, is the only thing to which either party would attribute possession of soul, P: therefore the absence of vital functions (non-M) is *only* found in things which are not possessed of soul (non-P). Therefore this argument satisfies the condition of *avyabhicāritva*[1]—*vaidharmyaṁ na vyabhicarati*—[2] and is valid.

greater extension than the other terms, while in the inference which is valid all three terms have the like extension" Vācaspati Miśra's account of the *avyabhicāritva* of a negative reason is based on the entirely different principle that the negative 'major premise' must have the form All non-P is non-M—according to Praśastapāda's formula Uddyotakara is content with the major premise All non-M is non-P—see below His interpretation of *avyabhicāritva* is that non-M is never P Vācaspati's is that non-P is never M

[2]There can be no doubt that the interpretation of this phrase here given is that which Uddyotakara intended But the actual statement (*NV* p 127 ll. 16—21) presents a difficulty "*Yadi tarhy asādhārano dharmo hetur, nityā pṛthivī gandhavattvād ity ādayo hetavaḥ prapnuvanti*—*Na, hetvarthāparijñānāt. satyam asādhāraṇo vaidharmyahetuḥ na punar vaidharmyaṁ vyabhicarati, gandhavattvam ca nityānityavyabhicāri Tasmād anvayino vyatirekinaś ca nānvayavyatirekau hetubhāve nimittam, kiṁtv anvayavyatirekayor avyabhicāraḥ*"—"It may be objected that if a quality restricted to the subject (S) is a valid reason, then such arguments as 'earth-substance is eternal because possessed of smell' will become valid arguments But the objection is based on a complete misunderstanding of what constitutes a valid reason It is true that the valid negative reason is formed by a quality restricted to the subject But in the case of the valid negative reason the opposite of the quality which forms the reason is not found in P as well as in non-P (*vaidharmyaṁ na vyabhicarati*)—Besides, in the case adduced by the objector, the possession of smell is as

It amounts to this. If M is only found in S, no *positive* evidence[1] that S is P will be available. If there is any positive evidence (XP's) available it will in fact invalidate the conclusion intended to be drawn (because it will *ex hypothesi* be a case of XP non-M): so that absence of positive evidence is a condition of the validity of the conclusion: in other words the argument must be *avidyamānasapakṣa* in order to be valid. If that condition is fulfilled, the negative evidence is bound to be uniformly in favour of the conclusion (assuming that there is any negative evidence forthcoming[2]), since the absence of M will be found *ex hypothesi* in all cases outside S, so that the concomitance of non-M and non-P will be invariable.

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a matter of fact found with non-P as well as with P (in the case of S, earth-substance, itself—for though earth-atoms are eternal, earth-composites are *not* · so that the argument is *bādhita*, i e. P is *not* found in the whole of the subject).—The fact is that it is not the (mere) positive concomitance and negative concomitance that make a positive and a negative reason respectively valid, but the *invariability* of the concomitance in either case "

At first sight it looks as if the statement *gandhavattvam ca nityānityavyabhicāri* were meant as an explanation of the phrase *vaidharmyam na vyabhicarati* But this is difficult, for Uddyotakara is precluded by his own principles from saying that the argument is *savyabhicāra* in the sense that M, possession of smell, is found with other non-eternal things: because M is an *asādhāraṇadharma*, i e only found in S (earth-substance being alone odorous in Indian physics), so that a counter-instance XM non-P—a *vipakṣa* in which M is present—is not forthcoming All that can be done is to adduce a counter-instance of the form X non-M P—a *sapakṣa* in which M is absent Therefore, if the clause were intended to explain *vaidharmyam na vyabhicarati* it should have run *gandhābhāvo nityānityavyabhicārī*.

Taking the text as it stands, the clause must be regarded as a parenthesis—"Apart from other objections this particular argument would anyhow be invalid, since it is *bādhita*."

[1]S itself cannot be adduced as evidence of connection between M and P without begging the question—for we do not yet know that S is P. And if there *are* other cases in which P is found—XP's or *sapakṣas*—they will not be evidence for connection between M and P, because *ex hypothesi* M will be absent in such cases.

[2]If none is forthcoming the rubric will be *avidyamānavipakṣa*, and the argument will be invalid There are four possibilities in the case of an *asādhāraṇadharma* which is used as a middle term (ignoring cases where M is not *sādhyavyāpaka*, i.e. where S is as a matter of fact *not* M, i e. where the argument is condemned *ab initio* as '*asiddha*') They are :—

(*a*) S and M coinciding with each other in extension also coincide with a limited P. The rubric then is *avidyamānasapakṣa*

The valid purely negative argument, as formulated by Uddyotakara, involves an illicit process of the major term.

"*Yāvad aprāṇādimat tat sarvaṁ nirātmakaṁ dṛṣṭam iti. aprāṇādimattvaṁ ca jīvaccharīrān nivartate. tasmād tad-avyabhicāri nirātmakatvam api nivartsyati*"[1].

vipakṣāvṛtti This is the valid use of an *asādhāraṇadharma* as a *hetu*=No. 15, the *kevalavyatirekin*.

(*b*) S and M coincide with each other in extension, but not with P, which is unlimited in extension. Rubric, *sapakṣāvṛtti avidyamānavipakṣa*. An example would be 'sound is an object of knowledge because an object of hearing', which is a good enough syllogism, though it stands condemned on the 'evidence' view of inference, since no negative evidence is available and the positive evidence goes against the conclusion This is No 12 above It is really quite as good an argument as Nos 10 and 11, which are commonly accepted as valid 'purely positive' arguments

(*c*) S and M coincide with each other in extension, but not with P, which is limited in extension Rubric, *sapakṣāvṛtti vipakṣāvṛtti* (No 6 in Uddyotakara's list=No 5 in the Wheel of Reasons) This is the normal type of the fallacy of 'too restricted reason', *asādhārana hetvābhāsa*, e.g. 'sound is eternal (or non-eternal) because the object of hearing'.

(*d*) S and M coincide with each other in extension, and with P, but all three are unlimited in extension. Rubric, *avidyamānasapakṣa avidyamānavipaksa*. There being no evidence at all the argument stands self-condemned, on the Indian theory of inference No 16 in the above table, the *anupasamhārin* of later logic But 'all is nameable because knowable'—which would fall under No 16—is as good an argument as 'the pot is nameable because knowable', the *kevalānvayin* type No. 10. In rejecting No 16 Uddyotakara lays down the principle on which he rejects it but unfortunately the reading is doubtful. If his principle is that a property unlimited in extension cannot be a valid middle term, this principle would exclude No. 10 (one of the supposedly valid *kevalānvayin* types), as well as No. 16 and the question whether Uddyotakara accepts the *kevalānvayin* could be answered in the negative. [It is true that the other 'purely positive' type No. 11 (a limited middle with an unlimited major) would not be excluded by this principle but Uddyotakara always speaks of the supposedly valid purely positive types as a pair, and there is nothing which would suggest that he would accept one and reject the other]

(The passage of the *Nyāyavārtika* here referred to is dealt with in the note on the *Anupasaṁhārin*, below, p 248 *seq*)

[1] *NV* p. 126 l. 18.

All that is without vital functions is without soul :
The living organism is *not* without vital functions :
Therefore the living organism is *not* without soul.

Vācaspati Miśra[1] in commenting on this passage says that the 'major premise' must be 'converted' (*vyatyāsena yojanā*) into the form *yāvan nirātmakam tat sarvam aprāṇādimad dṛṣṭam*—

All that is without soul is without vital functions.

Nor is there any formal objection to this conversion, from the point of view of those for whom life and soul are of equal extension. But it openly begs the question : for the opponent's position is that some things without a soul (viz., the living organism itself) *do* possess vital functions. Uddyotakara's formulation appears to avoid the *petitio*, since an opponent who maintains *all* things to be soul-less would have a formal difficulty in refusing to accept the proposition that all *inanimate* things are soul-less. But in thus avoiding an open begging of the question he merely transforms what is the same difficulty into the form of an illicit major. He is quite aware of the difficulty,[2] and attempts to meet it by an *argumentum ad hominem*. The critic of the argument can only substantiate his charge of illicit major by adducing, as an example of a thing which is *not* devoid of vital functions and *devoid* of soul, the subject (*pakṣa*, S)—the living organism itself · for, from the very nature of the argument, there is no other case of a thing possessed of vital functions (*not* devoid of vital functions) which can be instanced[3].

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[1]*NVT* p. 198 l. 11.

[2]Which he states in the form "only the absence of vital functions is excluded from the organism—not the absence of soul".

See *Note on the Indian Syllogism* in *Mind*, n.s. Vol. XXXI No. 123, p. 409 footnote, for further remarks on this argument.

[3]The opponent ought to produce a counter-instance in the form X M non-P, i.e a thing other than the organism (S) which is possessed of vital

And if an opponent is to be permitted to adduce the Subject (*pakṣa*, S) itself as an *enstasis* or counter-example, then no syllogism, not even the most cogent, will be safe from *enstasis*: and, even in the case of an argument such as 'sound is non-eternal because a product' (which both parties accept as a valid 'positive-negative' type) it will be possible to object that *in the case of sound*, the *pakṣa* itself, M is accompanied by non-P—i.e. that sound is a product and yet *not* non-eternal[1]

Uddyotakara's defence of the argument amounts to this.—There is no positive evidence. The opponent cannot therefore point to cases in which vital functions are found in the absence of a soul Nor can the defendant, on the other hand, point to cases in which vital functions are found together with a soul[2]. The case must be argued on the basis of the negative evidence. And here the defendant has it all his own way, from the very nature of the case: for all cases X non-P are necessarily non-M · so that no exception can be forthcoming to the concomitance of non-M and non-P—"*vaidharmyaṁ na vyabhicarati*".

The defence is ingenious; and it is not altogether misplaced ingenuity. For it is true that the nerve of the argument is the *difference* between the subject and all other things. But of course mere negation can prove

functions (M), but is not possessed of soul (non-P) But it is impossible to do so —This would be a counter-instance to Vācaspati's major premise, all that is without soul is without vital functions So that Uddyotakara does in reality meet the charge of illicit major by saying that the opponent cannot (without begging the question) object to the *converted* major premise. Why then does he not himself use the *converted* major, as Vācaspati does? Because he is well aware that, as the opponent cannot produce a case of X M non-P, so he himself again cannot produce a case of X M P. No 'evidence' is available, for either party, without *petitio*, in the sphere of what possesses M

[1] *NV* p 127 l 1 *pakṣavyabhicāropadarśane sati śakyam vaktum 'anvayini tu hetau śabde nityatvam astu sati kṛtakatva' iti.*

[2] See footnote 8, p. 246.

nothing[1]: and the weakness of Uddyotakara's position—a weakness inherent in the view that inference is an affair of 'evidence', arguing from particular to particular—is that he feels himself precluded from admitting the subject, S, itself as evidence. But 'Difference'[2] requires two sorts of evidence—positive as well as negative: and to insist that the argument is 'purely negative' is to exclude the positive factor.

(c) *The Anupasaṁhārin*[3]

This is a syllogism in which, all the three terms being of unlimited extension, there are no examples available, and the middle term is of course restricted to the minor (*asādhāraṇa*). Uddyotakara himself treats it as a case of the use of an *asādhāraṇadharma* as a middle term.

[1] Keith *ILA* pp. 120-121 "To arrive at a positive conclusion from a negative is in itself an unusual procedure" This is true when the negative does not function as 'the cutting edge of a positive'. Keith thinks the 'purely positive' is less objectionable than the 'purely negative' type · but a knife without an edge is quite as bad as an edge without a knife Indeed the inadequacy of the paradeigmatic formulation of inference comes out more clearly in the case of the 'purely positive' than in the case of the 'purely negative' type.

[2] There is an obvious analogy between the Indian distinction of middle terms or syllogisms as 'positive' and 'negative', and the 'agreement' and 'difference' of modern Inductive logic For the Indian distinction turns on the nature of the evidence available, i e it belongs to the Indian syllogism in its 'inductive' aspect But any attempt to press the analogy further might be misleading The Indian syllogism is a syllogism of superficial observation applied by thinkers whose interests were predominantly metaphysical to subjects which for the most part do not fall within the province of superficial observation Very much the same thing may be said of the western syllogism of course But the "inductive methods" *attempt* at least to formulate the exacter observations of experimental science although the attempt may be (as Bosanquet maintains it to be) on altogether wrong lines, being still confined within the 'linear' view of inference. See his *Implication and Linear Inference* pp 81-82

[3] *Upasaṁhāra* is a synonym of *upanaya* (see *NS* I i 38), and means the application of the example to the case under consideration. In the *anupasaṁhārin* type there can be no application because there are no examples Keith (*ILA* p. 145) renders 'the reason which does not subsume'. The name *anupasaṁhārin* appears to be late, but the type is *avidyamānasapakṣavipakṣa*, i e No. 16 of Uddyotakara's list. There are no negative examples because the major term is unlimited in extension, and no positive examples because the minor term is unlimited in extension.—The type may be indifferently regarded as a fourth variety either of the *avidyamānasapakṣa* types (Nos. 10—12), or of the *avidyamānavipakṣa* types (Nos 13—15), or of the *asādhāraṇa* types (see footnote 2 on page 244, *supra*)

As such it has to be differentiated from the valid 'purely negative' type. "*Yaḥ punar asādhāraṇo dharmaḥ pakṣa eva kevalaṁ, yasya tattulyavipakṣau na staḥ, sa kasmān na hetuḥ? Yathā sarvaṁ nityaṃ sattvāt*"[1]—"Why should not a middle term which is a peculiar property residing in the Subject (S) only, and with respect to which neither positive nor negative examples exist, be regarded as a valid reason? e.g. everything is eternal, because existent." The principle which was used to differentiate the valid 'purely negative' type, No. 15, from the fallacy of the 'too restricted middle' (*asādhāranahetvābhāsa*)—the principle that non-M is never found in XP's but always in X non-P's—is not applicable, because there *are* no cases of non-M, nor of XP, nor again of X non-P. Another principle is required, and Uddyotakara states it The text runs:—*satyam asādhārano na vyāvṛttaḥ avyāvṛtte hetuḥ*. As it stands this does not seem to give any sense. The editorial note expresses an opinion that *avyāvṛtto hetuḥ* is the true reading: but this again does not seem good sense. Jhā's translation implies a reading: *satyam, asādhāraṇaḥ. na vyāvṛttaḥ. avyāvṛtto na hetuḥ*. "True · the property of existence is a unique one; but it is one that is not excluded from anything; and by reason of this non-exclusion it cannot be a true negative *Probans*." This is good sense, though the principle enunciated—that an unlimited middle is never valid—would also condemn type No. 10, one of the supposedly valid 'purely positive' types ('the pot is nameable because knowable'). It is possible that Uddyotakara wrote *avyāvrtto* '*vyāvrtte na hetuh*—and meant by this, "an unlimited middle in an unlimited minor is not a valid reason". This would exactly describe the *anupasaṁhārin*.

The examples which Uddyotakara gives—all is eternal because existent, or because knowable,—are both

[1] *NV* p 127 *ad fin.*

false, because *as a matter of fact* the major of the argument (eternality) is not unlimited in extension (although the person who proposes the argument must be presumed to hold that everything is eternal—otherwise there could be no excuse for putting the argument under the rubric *avidyamānavipakṣa*). What would he have said of an argument which does *really* conform to the rubric, and of which the conclusion therefore *cannot but* be true,—such as the stock case 'everything is nameable because knowable'? He must have condemned it if he adhered to the view of inference as argument from like and unlike cases: for it is a necessary corollary of this view that about everything you can prove nothing.

Note A.

The introduction of avadhāraṇas into the trairūpya. Uddyotakara's criticism (*NV* pp. 58-59).

In his criticism of the three canons of the syllogism (*trairūpya*), as formulated by Diṅnāga in the line *Anumeye 'tha tattulye sadbhāvo nāstita' sati*, Uddyotakara points out that, on the one hand, it is necessary to read into them restrictive forces (such as are expressed by '*eva*' in various positions): and that, on the other hand, such restrictions cannot be read into the formula without making the whole self-contradictory, and some of the parts superfluous.

The formula says that a valid middle term—

i. resides in the *anumeya* (*sādhya*),
ii. resides in what resembles the *anumeya* (i.e. in *sapakṣas* or positive examples),
iii. does not reside in what is not like the *anumeya* (i.e. in *vipakṣas* or negative examples). That is to say: SP is M; XP is M; X non-P is not M.

Uddyotakara says that the first clause will fail to exclude such arguments as 'atoms are transitory because

they are odorous,—like a pot': i.e. arguments which are invalid because the middle is *sādhyaikadeśavṛtti*, i.e. resides in part only of the Subject, viz., atoms (since earth-atoms only are odorous, and no other kind of atoms)[1].

In order to exclude such arguments it is necessary to find somewhere in the *trairūpya* the requirement that the middle term should be *sādhyavyāpaka*, and not merely *sādhyaikadeśavṛtti*. That is, it is necessary to find the requirement that *all* SP should be M (which constitutes *pakṣadharmatā*).

The *Bauddha* now maintains that this requirement can be read into the first clause of the formula—*anumeye sadbhāvaḥ*—in virtue of a restrictive force (*avadhāraṇa*) which is implied in the statement. Uddyotakara asks: *what* restriction is intended? Two different restrictions are, in the first instance, possible—

(*a*) *anumeye sadbhāva eva*,
existence in the subject;

and (*b*) *anumeya eva sadbhāvah*,
existence *in the subject*.

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[1]That is, there is failure of *pakṣadharmatā* in this argument—as western schoolmen would say, there would be an illicit process of the minor, since the *anumeya* (that about which we are going to draw the inference of 'being transitory') is *all* atoms, not one class of atoms only

Of course there will also be a failure of *vyāpti* in the argument, i.e. the major premise cannot truly be stated as a universal proposition · since only some, and not all, odorous things are transitory (earth-composites are transitory, but earth-atoms are eternal)

But it is very noteworthy that Uddyotakara in this criticism of the *trairūpya* hardly raises the question whether it includes a statement of *vyāpti* in the sense 'all M is P' He uses the word *vyāpti*, but in the sense 'all SP is M—i.e in the sense of *pakṣadharmatā* He writes as if almost unconscious that *vyāpti* in the later sense of 'all M is P' (Praśastapāda's *vidhi* or formula for the *nidarśana* or 'major premise') formed any part of Diṅnāga's logical theory. From this silence it might be inferred either (*a*) that Uddyotakara did not think that it was the business of the *trairūpya* to formulate the requirement of a *vyāpti*, and was aware that Diṅnāga did not intend his formula to do this; or else it might be inferred;

But the latter is ambiguous. Does it stand for

(i) *bhavaty evānumeye sadbhāvaḥ*,

or does it stand for

(ii) *anumeya eva bhavati sadbhāvaḥ?*

In the form (i) you are asserting emphatically, as against the suggestion that M and SP do not co-exist, that ' there *is* existence of M in SP' (*asambhavo nivartyate*, non-co-existence is set aside) . but you do not indicate whether *all* SP is M or only *some* SP is M. So that a restriction in this form will be of no use. In the form (ii) you are asserting that the concomitance with M is found *in the anumeya*, but nowhere else. In that case you are contradicting your second canon, which tells us that the middle term must be found elsewhere than in the *anumeya* or SP,—to wit, in the *sapakṣa* or XP. And the restriction does not give the required force in any case : for it says that ' *only* SP is M '; and this does not imply (what we require) that ' *all* SP is M '.

As to the first main alternative, (*a*) above i e taking the ' *eva* ' after the second word (*uttaram avadhāraṇam*, i.e. *anumeye sadbhāva eva*,—contrasted with *pūrvam avadhāraṇam*, i.e. *eva* taken with the first word in the sentence, *anumeya eva sadbhāvaḥ*) : the *Bauddha* says that this gives the meaning of a *vyāpti* (*tasya vyāptir arthaḥ*). "Even so,[1] it is the *anumeya*, SP, that is ' distributed ' by the universality of predication here (*avadhāritaṁ vyāptyā*)—not the property, viz.,

(*b*) that he refrained from raising the question whether the requirement of *vyāpti* was or ought to be formulated in the *trairūpya* because he does not wish here to anticipate the discussion of *vyāpti*, which forms the climax of his criticism of Buddhist logic

Uddyotakara himself rejects the notion of *vyāpti* universal connection between qualities in the abstract, as unintelligible. See below Chapter IV, section 5.

[1]Uddyotakara begins with a *tathāpi*—'even so'—which implies further criticism But his criticism starts with the admission that the first clause thus understood, meets the difficulty first raised · for it does formulate the requirement that *all* SP must be M—the requirement of *pakṣadharmatā*. But then it makes the second clause superfluous.

connection (*dharma*) : for the principle is that the restriction applies to something other than that to which the particle *eva* is attached (*yata evakaraṇam, tato 'nyatrā vadhāraṇam iti*). That is, when the *eva*, 'only', is attached to the predicate (*sadbhāva*, in the statement *anumeye sadbhāva eva*), it is the subject of the proposition (*anumeya*, here) that is delimited (*avadhārita*, i.e. 'distributed'. Cf. the formula of our schools logic · only P is S = all S is P)[1].

By the addition of the restrictive particle to concomitance-with-M, the *anumeya* (*SP*) is restricted (to concomitance-with-M, i.e. is 'distributed'—*niyata*); but '*concomitance*' is left undistributed (*prasṛta*), owing to there being two possibilities, viz., equipollence and greater extension (*vyāptyativyāptibhyām*, i.e. it *may* be that all cases-of-concomitance-with-M are cases-of-SP; but it may also be that only *some* cases-of-concomitance-with-M are cases-of-SP)[2]

But if M extends beyond SP, there will be two sets of cases left over to which it might extend,—cases of P other than SP; and cases of non-P. It may be admitted that the Buddhist formula rightly excludes the extension of M to non-P in its third clause, *nāstitā 'sati*. But then the second clause *tattulye sadbhāvaḥ* becomes pointless, seeing that all that the second clause desires to assert is

[1]Vācaspati gives the case of 'the lotus is blue' This admits of three *avadhāraṇas*, expressible in English by accentuating (i) the subject · '*The lotus* is blue', i e nothing else is blue · (ii) the predicate the lotus is *blue*, i e not any other colour (iii) the copula the lotus *is* blue, i e it is not true that the lotus is never blue

[2]The expression is clumsy because *sadbhāva* or *sambhava* (*existence* of M in SP, *concomitance* of M with SP) has been made the predicate—*viśeṣaṇa or dharma*, as Uddyotakara and Vācaspati here respectively call it—of the proposition It is the 'is' that has the 'only' attached to it, in the present reading of the proposition 'SP is M'—'SP is-only (never fails to be) M'. This amounts to saying that SP *must be* M = *all* SP is M Uddyotakara's point is that it does *not* give us any universal proposition about M (As the western schoolman would say, it does not tell us that all M is S P)

simple concomitance (i.e. not universal concomitance) of M with cases of P other than SP : and this has already been provided for by the fact that you have interpreted the first clause in such a way as not to exclude an *ativyāpti*, or extension of M beyond SP to other cases of P.

The *Bauddha* replies that the second clause is stated for the sake of a restrictive force, again, which is to be read into it. Uddyotakara asks again—what restriction is meant? Are we to understand the second clause to mean—

(*a*) *tattulya eva sadbhāvaḥ?*

or (*b*) *tattulye sadbhāva eva?*

The former interpretation is impossible, because it 'distributes' the predicate, *sadbhāva*, so that the proposition would mean that M's existence is restricted to XP's : with the result that this latter clause would sublate the former, which asserted that M is found in SP[1]. It is not possible to say 'feed only Devadatta, *and Yajñadatta*'; and so, here also, the sentence 'the middle term exists only in XP's, *and in SP*', would be the language of a lunatic (*unmattavākya*)[2]. If you adopt the other alternative and interpret the clause to mean *tattulye sadbhāva eva*—the middle term *must* exist in similar cases, XP's,—then you exclude, as invalid, middle terms which reside in *some* but not in *all* similar cases

[1]*Purvottarapade bādhite bhavataḥ* I have followed Dr. Jhā's interpretation here. Vācaspati Miśra however explains the phrase to mean that the first and the third clauses of the *trairūpya* are sublated by this interpretation of the second clause,—the first, because it is contradicted by the second; and the third, because it only says over again what the second is thus made to say (*paunaruktyena*).

[2]Dharmakīrti however defended just this position, under the name of *samuccīyamānāvadhāraṇa* or 'aggregative restriction', as is stated by Vācaspati Miśra. See Note B for Vācaspati's criticism of this doctrine There is no indication that Uddyotakara was acquainted with the view, as held by Dharmakīrti. He is merely giving an example of what he regards as abvious self-contradiction. (See also below, p. 258 n 1, p. 259 n. 2)

(*sapakṣaikadeśavṛtti*, i.e. the normal valid '*Barbara*' in which P is greater in extension than M—to use the language of the western schoolman). In that case your middle term which resides in part only of the things similar to the Subject, such as the middle term *prayatnanāntarīyakatva*[1], would *not*[2] be a valid middle term.

What the *Bauddha* wishes to say is that M *must* be found in *some* (not necessarily in all) XP's. Uddyotakara's point here merely is that his formula does not succeed in saying this,—not even with the help of '*avadhāraṇas*'.

Elsewhere Uddyotakara raises his real objection, which is that a valid argument need not satisfy this condition. For a 'purely negative' argument is valid, i.e. an argument in which there are no *sapakṣas*.

Uddyotakara now proceeds to the criticism of the third clause of the definition.

" The clause *nāstitā 'sati* has been formulated without reflection. To say that the *hetu* is not found in what is not (*asati*) is absurd on the face of it : for that which has non-existence as its character is nothing; and nothing

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[1]The usual form of this middle term is *prayatnānantarīyakatvād* (which of course makes no difference). The argument is *śabdo 'nityaḥ, prayatnānantarīyakatvād*—'sound is transitory, because an effect of volition', and is one of the two valid types of syllogism given by Diṅnāga in his list of nine valid and invalid types of syllogism in the *Pramāṇasamuccaya*, which gives the nine reasons exactly as given in the *Hetucakraḍamaru*. See *Fragments from Diṅnāga*

[2]*Yas tajjatīyasyaikadeśavṛttiḥ prayatnanāntarīyakatvādis tena sa hetur iti prāptam* Jhā suggests the true reading . . . *te, na sa hetur* . . ,which is confirmed by the Benares 1920 edition of *NVT*, *ad loc.*

This text (p. 192 l. 9) gives what is clearly the right reading .

etad eva sphorayati YA iti. te, tava darśane.

This makes it plain that the true reading of the *NV* must be that implied in Dr Jhā's rendering, viz , . . . *te, na sa hetur iti prāptam* (instead of *tena sa hetur*, etc , in which the Chaukhamba and the Vizianagram editions agree, wrongly). The older texts of *NVT* reads *etad eva sphorayati ITI TE*, on which the editor notes *idam mudritavārtikapustake nāsti.*

cannot serve as a ground or support (*ādhāra*) of which something can be denied ".

The *Bauddha* makes the usual reply—this clause too has the purpose of *avadhāraṇa*, restriction. Uddyotakara asks: what is restricted? Do you mean (1) *nāstitaivā 'sati?* or (2) *asaty eva nāstitā?* If the former, the clause is superfluous, for it would be understood without mention[1]. Suppose then that the latter, *asaty eva nāstitā* is the meaning. Then an argument like 'this is a cow, because it has horns' can claim the title of valid reason. For the non-existence (*nāstitā*) of horns is certainly restricted to what is other-than-cow, and so the condition *asaty eva nāsti* is satisfied. though the condition *nāsty eva* would not be satisfied.

asaty eva nāsti means that M is absent only in non-P,. horns are absent only in non-cows. That is, All creatures without horns are other than cows, or, only creatures other than cows are hornless. This condition is satisfied.

asati nāsty eva means that M is only absent—never present—in what is other than P. X non-P's are *only* non-M, or, *all* non-P's are non-M. This condition is of course not satisfied by the argument, for we cannot say that All non-cows are hornless, or that only hornless creatures are non-cows. This is of course the essential condition, as expressed in the later formula *asattvam eva vipakṣe*, i e. the *hetu* must be absent in *all* the *vipakṣas* And Uddyotakara's only objection to this formula is that it has already been stated in *tattulya eva sadbhāvaḥ*[2].

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[1]It 'would be understood' from the previous clause, *tattulya eva sadbhāvaḥ*

The previous clause having been interpreted to mean that '*all* existence of M is in XP', it is superfluous to add that 'M *never* exists in X *non*-P' See also next note.

[2]Vācaspati says (*NVT* p. 130 1 5) *prathamaṁ kalpaṁ dūṣayati YADI TĀVAD iti. Tattulya eva sadbhāva ity anena gamyata ity arthaḥ.*

Note B.

Dharmakīrti's doctrine of the samuccīyamānāvadhāraṇa as criticised by Vācaspati Miśra (*NVT* p.129).

The difficulty is that the *Bauddha* has so interpreted the first two clauses of the *trairūpya*, by reading '*avadhāraṇa's*' into them, as to make the first canon state that the middle term must reside in the subject of inference (*anumeya*), while the second canon states that it must reside in things which resemble the subject *only*[1]. But if it is to reside *only* in things *like* the subject, then it seems to be excluded from residence in the subject itself: so that the second canon seems to contradict the first. For, as Uddyotakara puts it, only a lunatic would say 'feed Devadatta only,—and feed Yajñadatta'. Vācaspati interprets this remark in the sense which it clearly bears, i.e. as an illustration of the contradiction of the first clause by the following clause (*pūrvapadena saha virodhe nidarśanam āha* NA HI BHAVATĪTI—*NVT* p. 128 l 22) He then goes not to state the doctrine that contradiction in such cases can be avoided by understanding the restriction to be aggregative (i e. if the 'only' applies to the aggregate Devadatta-and-Yajñadatta, there is no difficulty). "The opponent suggests that in saying that the middle term must reside in the subject SP, and in the *sapakṣa*, XP, *only*, an 'aggregative restriction' is intended, i.e. the 'only' restricts the middle term from residence in *vipakṣa's* X non-P's, but not from the subject, SP. (*samuccīyamānāvadhāraṇam vipakṣamātrād vṛttiṁ vyavacchinatti, na tv anumeyāt*). An illustration is to be

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Dr. Jhā has overlooked this interpretation of Vācaspati's, and takes the passage as meaning that the word *asati* is superfluous in the phrase *nāstitaivā 'sati* But Vācaspati's interpretation is clearly correct

[1]This accurately represents the Buddhist formulation of the *trairūpya* with the help of *eva*, as given by Dharmakīrti in the *Nyāyabindu anumeye sattvam eva, sapakṣa eva sattvam, asapakṣe cāsattvam eva* (*NB* p. 104 l. 8).

found in the sentence: 'In the beginning he generated from himself two sons,—Nara and Nārāyaṇa only (*Naraṁ ca Nārāyaṇaṁ eva ca*)'. It is with a view to this suggestion that the *Vārtika* says 'and so here also, the statement that the middle term exists in things like the subject only, and in the subject, would be the language of a lunatic[1]. For, if it were a case of aggregative restriction, the word 'only' would be attached to the corresponding word in both clauses, i.e. it would be attached to the word *anumeye* in the first clause (*anumeya eva sadbhāvaḥ*, M must be found in SP only) just as it is attached to the word *tattulye* in the second clause (*tattulya eva sadbhāvaḥ*, M must be found in XP only), in the sense of excluding M from connection with anything else. (In that case we could have an aggregative restriction, or restriction applying to the aggregate SP-and-XP—'M must reside in SP-and-XP only'.)

—But if we thus read the first clause as meaning that 'M resides only in SP' we should (as pointed out before) be admitting, as valid, a middle term which resides in a part only of SP (*anumeyaikadeśavṛttir api hetuḥ syāt*)[2] And (in the sentence quoted as a parallel. 'he generated two sons, Nara and Nārāyaṇa only') it is certainly not the case that the particle *eva* ('only') is attached

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[1]The sentence translated in Note A above, p 254. But, as noted there, there is no indication that Uddyotakara is referring to a view such as Dharmakīrti's,—although Vācaspati seems to suggest that he was —In fact Uddyotakara speaks as if the possibility of a defence of 'aggregative restriction' had not even occurred to his mind · and the passage is therefore perhaps an indication of his chronological priority to Dharmakīrti [Keith *I L.A.* p 28 states that a work *Vādavidhi* to which Uddyotakara refers—cf. *NV* pp 121, 159—"can with certainty be identified with the *Vādanyāya* of Dharmakīrti." But this identification, for which Vidyābhūṣaṇa is responsible, is very doubtful and that Vidyābhūṣaṇa himself became doubtful about it later is indicated by a note to p 124 of his *HIL*—"it is reported that Vasubandhu too wrote a work named *Vādavidhi* which is no longer extant". Vācaspati Miśra's comment on the *NV* passages which refer to *Vādavidhi* leaves the impression that 'Subandhu' i e. Vasubandhu, is the opponent against whom Uddyotakara is arguing This is Gangānātha Jhā's view—See his *Transl* vol. I. pp 441 and 454, footnotes See *Diṅnāga Fragments* pp 26-27 and Tucci in *J R A S*, July 1929, pp 451—488

[2]See Note A above, p. 252.

to the word Nārāyaṇa in the sense of precluding union (of the character of being generated by the being in question) *with anything else* (*anyayogavyavacchedena*), while it is attached to the word Nara in the sense of precluding from Nara *non*-union (of the character of being generated by this being—*ayogavyavachedena*)[1].

—Very well then (replies the *Bauddha*), it can be maintained by a person who wishes to avoid applying the restrictive particle in different senses in the two clauses, that the particle *eva* is used in the second clause also in the sense of precluding non-union with M in the case of the *sapakṣa*, just as it is used in the first clause in the sense of precluding non-union with M in the case of the *anumeya*.—This is the doubt which the *Vārtika* raises in the words 'If you adopt the other alternative and interpret the first clause to mean *tattulye sadbhāva eva*, etc.' · and it disposes of the doubt in the words 'then you exclude as invalid middle terms which reside in *some* but not in *all* similar cases[2]''.

After some further discussion[3], the argument continues as follows. The *Bauddha* urges that "It

[1]That is, the sentence certainly does not mean '*he did* generate Nara, and he *generated only* Nārāyana with Nara' *In the same way, in* the *trairūpya*, you cannot combine your *samuccīyamānāvadhāraṇa* (in the sense of excluding concomitance-with-M from everything other than SP and-XP *anyayogavyavacchedena*) with a separate and different function of *eva* in the first clause (that of excluding non-concomitance-with-M from SP,—*ayogavyavacchedena*) That is, the application of the doctrine of *samuccīyamānavadhārana* will not enable you to get out of your formula the meanings which you require, viz , (i) SP *cannot but* be M=All SP is M, and (ii) *only* SP-and-XP are M

[2]For these words of the *Vārtika* see Note B, above, p 254.—It is clear that Vācaspati is here reading into Uddyotakara a reference to the *samuccīyamānāvadhārana* doctrine *I do not think there is* any indication that Uddyotakara had Dharmakīrti's arguments in view See note 1 p 258.

[3]Omitted here because, turning as it does on technicalities of *Mīmāṁsaka* exegetics, I am uncertain as to its exact meaning. The *Bauddha* appears to argue that the main statement (*vidhi*) is that " the middle term resides only in the *sapakṣa*", and that the first clause "the middle term always resides in the *pakṣa*" is to be read as an explanation (*anuvāda*) of

cannot be said that the two sentences cannot unite into a single sentence on the ground of a contradiction betweeen them. No such contradiction can be shown to exist, seeing that the exclusion from *other things* of connection with the middle term (*anyayogavyavacchedasya*) which is asserted in the statement that the middle term resides only in things like the Subject (*tattulya eveti*) can also be understood as having reference only to *things unlike the subject* (and not to the subject itself. *vipakṣamātraviṣayatvenāpy upapattau*). Therefore the alleged mutual contradiction of the clauses is to be stated as turning on the fact that their meaning (like the meaning of all words, on the *Bauddha's* '*apoha*' theory) is the exclusion of what is different[1].

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this Thus there is no difficulty in making a unity of the two clauses — The *Naiyāyika* replies that *there will be a break in the sentence-unity* (*vākyabheda*), because a genuine *anuvāda* must not add anything to the main statement,—*anūdyamānaṁ na viśeṣṭum śakyate.*

[1]*tasmād anyāpohārthatvena padānāṁ virodho vaktavyaḥ* —The word *padānām* may be constructed either with the preceding word (in which case the sense is 'the meaning *of words* consists in exclusion of what is other'); or with the following word (in which case the sense is 'the mutual contradiction *of the clauses* . '). I have indicated the ambiguity by the clause in brackets in the translation

Stcherbatsky (in *le Muséon* n s vol. v, 1904) has connected the formulation of the *trairūpya* by means of *avadhāranas* with the *apohavāda* The connection is explicitly stated in this passage, which therefore confirms Stcherbatsky's view But his inference that the use of the *avadhāraṇas* originated with the Buddhists, as a natural corollary of the *apohavāda*, and is therefore borrowed from them by Praśastapāda carries no weight for the use of *avadhāraṇas* was inevitable, apart from the *apoha* theory.

Nor is it quite clear from this passage that it is the *Bauddha* himself who suggests that the clauses of the *trairūpya* are to be read in the light of the *apoha* theory The present sentence *may* be read as coming from the mouth of the *Bauddha*—'therefore if you are going to show that the clauses are mutually contradictory, you will have to find another proof, and your proof must bear in mind our view that 'meaning' is nothing but saying what a thing is *not*'. But it can as well be read as from Vācaspati himself 'therefore (seeing that you have put up a defence against Uddyotakara's line of criticism) we shall use your own theory of *apoha* to prove that on your own principles the clauses of the *trairūpya* are mutually contradictory'. This latter reading better suits the connecting phrase which follows, *Tathā hi* For *tathā hi* always clinches a statement just made,—either by an example or by an explanation of meaning. The difficulty of connecting the two sentences otherwise is indicated by the sentence which I have inserted in brackets in the translation.

(Well, mutual contradiction *can* be established from this point of view.) Thus · in the clause 'The middle exists in the Subject' (*anumeye sadbhāvaḥ*), the meaning (of the words and of the clause—*padārtha*)[1] will be: 'The middle *exists*, i.e. does not fail to exist, in the subject, and it exists *in the subject*, i.e. not in what is not the subject' (*anumeya eva, nānanumeye, sadbhāva eva, nāsadbhāvaḥ*)[2]. And thus the absence of the middle from the *sapakṣa*, as well as from the *vipakṣa*, has been stated! In the same way also in the clause 'The middle exists in things like the subject' (*tattulyasadbhāva*) the meaning of the words (or clause—*padārtha*) will be 'The middle *exists*, i.e. does not fail to exist, and exists *in the sapakṣa*, i.e. not in what is not the *sapakṣa*'. And thus its non-existence in the Subject is declared!

And if you say "we do not assert (*na ca* . . *iti cet*)[3] possibility of an aggregation (*samuccayasambhava*) of the meanings of the terms (*padārthayoḥ*) 'subject' and 'thing like the subject', *as mutually exclusive meanings* (*parasparaparīhāravatoḥ*) but we assert *actual* aggregation together (*parasparasamuccayasadbhāva*), on the ground that both terms alike signify exclusion of simply what is different from the subject (*vipakṣamātravyāvṛttiparatvāt*)[4]" —then our reply will be that this is

[1]again the ambiguity in *pada*, noted above The equivocal use of the word here seems deliberate, as intended to mark the connection between the discussion of the meaning of the clauses—*pada*—of the *trairūpya*, and the *Bauddha* theory that the meaning of words—*pada*—lies in *apoha*

[2]This is the meaning in the light of the *apoha* theory. According to that theory S is P should mean 'not-non-S is not-not not-non-P' But Vācaspati does not concern himself with the permutation of S

[3]*na cānumeyatattulyapadārthayoḥ parasparaparīhāravatoḥ samuccaya sambhavah, dvayor api vipakṣamātravyāvṛttiparatvāt parasparasamuccayasadbhāva iti cet* I think it is possible to understand this only by taking *iti cet* as referring back to the whole sentence from *na ca* —The sense is that the Buddhist restates his doctrine of *samuccīyamānāvadhāraṇa* in the light of the *apohavāda* "We do not mean that SP and XP are two different things which form an aggregate by addition There is no need of *adding* them for both really mean the same thing SP means what is *not vipakṣa* and XP means what is *not vipakṣa*".

[4]What the Buddhist is really aiming at is clear What is not SP, and what is not XP, *are* both identical in the important sense that both are

impossible (*na*); because in that case 'what is not a tree' and 'what is not a cow' would refer to one and the same substrate (i.e. would be identical, *sāmānādhikaraṇya*), since the meanings of the terms 'tree' and 'cow')[1] will be indistinguishable in so far as both alike signify exclusion of elephants and so forth[2].

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non-P and this is the vital aspect of the *vipakṣa* for the purposes of syllogism,—that *it is non-P* But *vipakṣa*, in the sense of concrete cases of non-P, also has a doubtful contrast on the one hand with the concrete SP—*it is non SP* and on the other hand with the concrete XP—*it is non XP* And in this sense it is not true that SP=XP (the equation which the *Bauddha* really aims at making) because both alike exclude the *vipakṣa* SP excludes non-SP and XP excludes non-XP and they are different because they exclude different things,—even on the *apoha* view of the meaning of terms unless the *Bauddha* is prepared to admit that a cow is a tree on the ground that cow=not-non-cow, and tree=not-non-tree, and so both *exclude the same thing*—seeing that non-cow=elephants, etc, while non-tree also=elephants, etc '

In other words, *vipakṣa* (as meaning what is other than the *pakṣa* or *anumeya*) shares in the ambiguity of the term *pakṣa* or *anumeya*, which sometimes means abstract P and sometimes concrete SP The *Bauddha* has formulated his *trairūpya* or canons of syllogism as an affair of concrete SP and XP, however,—not in terms of relations between an abstract S and an abstract P But he now wishes to profit by the ambiguity of the term *anumeya* or *pakṣa*, so as to argue that SP really=XP in so far as both exclude what-is-other-than-the-*pakṣa*,—which he now interprets to mean what-is-other-than-P Vācaspati however holds him rigidly to the other meaning of *anumeya* or *pakṣa*, viz., the meaning SP and thereby to the other meaning of *vipakṣa*, viz, the meaning non SP

(Vācaspati's attitude will lead to a difficulty which he does not raise, viz., that the *sapakṣa* is identical with the *vipakṣa*, in so far as both are other-than-SP This may explain Dharmakīrti's choice of the term *asapakṣa*, in place of *vipakṣa*, in the *Nyāyabindu*,—though that term would seem to entail the no less undesirable consequence that *asapakṣa*=*pakṣa*, as both excluding the *sapakṣa*)

[1]*nāvṛkṣo 'gaur ity anayor api hastyādinivṛttimātraparatvenābhinnārthayoḥ sāmānādhikaraṇyaprasaṅgāt.* (The *na* stands alone, referring to the *iti cet* of the preceding clause)

The general meaning is that the application of the *apohavāda* to justify the identification of *anumeya* and *sapakṣa*—SP and XP—would prove too much for it could also be applied to prove that a cow is a tree If SP and XP are identical in so far as both exclude non-P, then a cow and a tree are identical because both exclude elephants and other things.

[2]Vācaspati concludes by saying that the doctrine of the *samuccīyamānāvadhāraṇa* has not the authority of Dinnāga, and is in fact inconsistent with certain of his criticisms of the *Vaiśesikas* (See *Dinnāga Fragments* p 16) It is Dharmakīrti's own doctrine *Samuccīyamānāvadhāraṇābhidhānaṁ Kīrteḥ svātantryeṇa* (*NVT* p. 129 last line).

CHAPTER IV

THE PROBANDUM

The nature and form of the probandum (anumeya), and the relation of the 'terms' in inference.

Meaning of the problem—Diṅnāga on the *probandum*—Kumārila on the nature of the "terms" in inference, and on the '*probandum*'—Uddyotakara's critique of theories of the *probandum*—His attack on the "major premise", i e the notion of inseparable connection in the abstract (*avinābhāva*)—His own view of the *probandum*—Kumārila on the form of the conclusion (=rejection of "Fourth Figure" arguments)—Kumārila's reference to Uddyotakara's theory.

SECTION 1 MEANING OF THE PROBLEM

Vātsyāyana, in commenting on the *sūtra (NS* I i. 5) in which inference is described, gives an illustration of *pūrvavat* inference,—' fire is inferred through smoke' (*dhūmenāgnih*. *NBh*. p. 19 l. 2) He notes elsewhere the ambiguous use of the term '*probandum*'[1] (*sādhya*), pointing out that it is used to mean either the property qualified by the thing (sP) or the thing qualified by the property (Sp)—*sādhyam ca dvividham* : *dharmiviśisto va dharmah, śabdasyānityatvam; dharmaviśisto va dharmī. anityah śabda iti (NBh* p. 41 l 10). But he does not specifically raise the question which Diṅnāga, Uddyotakara, and Kumārila discuss :—What precisely is it that is inferred in an inference?

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[1]The earlier logicians were haunted by the ambiguity of the term *sādhya or anumeya* Diṅnāga seems to have been the first to make a serious effort to lay this equivocal ghost (the eight lines in which he does so are fortunately cited by Vācaspati in *NVT* p 120, see *Diṅnāga*, Fragment F) Praśastapāda does not deal with this difficulty Diṅnāga was followed

Four views of the inferendum

The form of presentation tends to conceal the importance of the issue which is raised in this discussion. We are told that some held that we infer '*fire*' from smoke, others that we infer the *relation* between fire and hill,—that Diṅnāga rejected these views and held that we infer '*fiery hill*',—while Uddyotakara rejected Diṅnāga's teaching in favour of a doctrine that we infer '*fiery smoke.*' The statement is, in a sense, accurate; but it conveys very little as to the real point at issue We are told again that Uddyotakara denies universal connection (*avinābhāva*) of characters and takes exception to the assertion that wherever there is smoke there is fire. In a sense, again, this is true; but it gives us no understanding of the real meaning of Uddyotakara's apparently suicidal attack on the major premise. And the texts themselves, in spite of the deceptive simplicity of their phrases, do not say what they mean · they are easy to construe but difficult to understand

The most interesting thing in the discussion is Uddyotakara's rejection of the major premise and his insistence that M and P have no connection except in S: and that the S again is not *any* S that happens to show M, but is M individualised,—*SM* (which is the meaning of the doctrine that what we are proving is, not that this *hill* is fiery, but that this *smoke* is fiery) It has certain affinities with the Aristotelian doctrine of 'essence', and Uddyotakara's attack on the major premise is of permanent value But his *parāmarśa* (the realisation that SM is *essentially* SMP)

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and criticised by Uddoyatakara, who discusses this question in *NV* pp. 52 l 11—54 l. 2—Then comes Kumārila's discussion of the same topic, in *Ślokavārtika*, *anumānapariccheda*, verses 23—53. He refers to Uddyotakara's view

re peculiarly difficult to understand. *See HIL* a statement of Diṅnāga's view

was not developed into a positive doctrine of individual essences which might have been a constructive substitute for the '*vyāpti*' or abstract universal. And in any case, the doctrine of essences, whatever its philosophical value may be, has not proved easy to formulate as a workable logical doctrine. And it is not perhaps surprising that the *vyāpti* doctrine held the field in India, despite Uddyotakara's criticisms: just as the teaching of Aristotle's *Prior Analytics* (or the schools logic which developed out of that teaching) has in the West supplanted the more truthful and therefore less easy teachings of the *Posterior Analytics*. Logic in practice is a rough-and-ready art, and tends to the convenient rather than the truthful formulation. Thus both in the East and in the West the great class of reasonings which develop relational concepts has been ignored in the formulation of inference for they do not proceed from a *vyāpti* or major premise on the one hand; nor do they lend themselves to formulation under Uddyotakara's interpretation of the *dharmidharmabhāva* rubric.—In another aspect Uddyotakara's doctrine is a re-assertion of the original Indian view of inference as an affair of examples: for it insists that the connection of properties is *in the concrete*, and that (as J. S. Mill put it) "nothing is added to the evidence" by taking the properties in the abstract and asserting their inseparable concomitance apart from what possesses them.

SECTION 2 DIṄNĀGA'S DISCUSSION OF THE PROBANDUM

Diṅnāga refers to three solutions of the problem, and accepts the third

The quality P as the probandum

(*a*) Some say that from one quality M we infer *another* quality (*dharmāntaram*) P.—The objection to

this account of inference is that when M is presented in experience it is either experienced with P—in which case we are not inferring anything *new* now, when we infer ' P ' : or else it is experienced in the concrete instance XP.—in which case we ought to infer not P *in general*, but that particular concrete XP.

The relation between S and P as the Probandum

(*b*) Some say we infer the *relation* between S and P, arguing that neither S nor P can be the *probandum;* since both are *already* known —Diṅnāga objects that (i) the *anumeya* (in one sense) must be universally predicable of the middle term. But we do not say that ' all smoke is *a relation to* fire ' We say that it is fiery. (ii) The *anumeya* (in another sense) is the thing qualified by the property But we do not say that ' *the relation* is fiery '. We say that *the hill* is fiery. Language bears witness to the fact that the *anumeya* is (in one sense) fire, and (in another sense) the hill, i.e. it is S-as-qualified-by-P,—not *the relation* between S and P. The *relation* does not show these two aspects (*sambandhe ' pi dvayaṁ nāsti*). Besides, if ' relation ' were the object of the inference we should use the genitive case (*parvatasyāgnir asti*) instead of the locative (*parvate 'gnir asti*). It is true that we may express our conclusion in the form *parvato vahnimān,*—the hill *possesses* fire : and ' possession ' is (according to the grammarians) just the significance of the *genitive* case. But this ' *possession* ' is not the primary object of the assertion, being on the contrary only a subordinate element in the assertion (*avācyo 'nugṛhītatvāt*)—nor is it what is asserted as concomitant with the middle term in the major premise [the major does not take the form "wherever there is smoke there is *possession of* fire."

It takes the form " wherever there is smoke there is *fire*."]

S-qualified-by-P as the Probandum.

(c) What is inferred is the thing-as-qualified-by-the-property,—S-as-P. This is Diṅnāga's own view. " The invariable concomitance of the mark with the property is seen in other cases. and being established therein it will prove the subject as joined with the property (i.e. it will prove S-as-qualified-by-P)."

The lines from Diṅnāga in which the above discussion is embodied would hardly be intelligible in themselves. But the first part of Kumārila's treatment of the topic is an exactly parallel passage,—written probably with these lines of Diṅnāga in view. The result is that Pārthasārathi Miśra's lucid comment on the passage in the *Ślokavārtika* provides at the same time a valuable comment on the fragment from Diṅnāga.

It will be convenient to translate first the first half of the *Ślokavārtika* passage, as being parallel to the criticism of Dinnaga. then to deal with Uddyotakara's criticism of Dinnāga · and finally to translate the second part of the *Ślokavārtika* passage

SECTION 3 KUMĀRILA ON 'TERMS' IN INFERENCE

[*Ślokavārtika, Anumānapariccheda*, 23—34]

Upāttaś caikadeśābhyāṁ dharmy apy atraikadeśavān

Śabara's Bhāṣya on *MS* I.1.5 (p.10 l.11) has defined inference as *jñātasambandhasyaikadeśadarśanād ekadeśāntare 'saṁnikṛṣṭe 'rthe buddhiḥ*—"knowledge, on the part of a man who knows the relation between the two terms, of the second term, which is a thing not present to

sense, as a result of experience of the first term[1]." Kumārila supposes an objection to be raised to this definition on the ground that it mentions the two terms (M and P of Western logic), but fails to mention the *ekadeśin* or *ekadeśavat*—the *possessor* of these two 'aspects' or 'terms'—the Subject (S of Western logic : *pakṣadharmin*, in Pārthasārathi Miśra's terminology : = *anumeyadharmin*, *sādhyadharmin*). He answers the objection in this line :—

" The Subject also, the possessor of the 'terms', is comprehended in the definition by mention of the two 'terms' ".

24*a*. *apārārthye hi dhūmādeḥ svarūpair naikadeśatā*

" For things like smoke (and fire) would not be terms at all simply in virtue of what they are in themselves; since they would have no reference beyond themselves ".

He is here justifying his statement that mention of the Subject is comprised in the use of the word '*ekadeśa*', 'term'. The meaning is that to call 'smoke' and 'fire' *terms* (*ekadeśa*) is to imply a Subject—since only in reference to a Subject could they be spoken of as *ekadeśa*.

[1]In footnote 2 to the first page of the *Note on the Indian Syllogism* (*Mind*, XXXIII, *n. s* no 132—1924—p. 398) it was stated that "Indian logic has no *generic* name for the term". The statement needs qualification in view of the use of *ekadeśa*—in a sense very close to that of our 'term'—in the present passage of the *Ślokavārtika* And Diṅnāga in one passage (Fragment N) uses *aṃśa* in the sense in which Kumārila here uses *ekadeśa* — But it is to be noted that only the M and P are called *ekadeśa* What we should call the third or minor term, the S, is contrasted with the *ekadeśa's*, M and P, as being *ekadeśavat*—the *possessor of the terms* Therefore, if we are to render *ekadeśa* by 'term', we shall have to say that the Indian syllogism only has two 'terms' · for S, the subject, is not a term, but a possessor of the terms.

24*b*. *sa eva cobhayātmā'yam gamyo gamaka eva ca*

"And it is just this, the Subject, namely, that is both at once, i.e. both *probandum* (P) and *probans* (M)[1].

25*a*. *asiddhenaikadeśena gamyaḥ siddhena bodhakaḥ*

"Through the unknown aspect of it the Subject is *probandum*—to be proved: and through the known aspect it is *probans*".

Pārthasārathi Miśra apparently says: "An *ekadeśa* or 'term' could not be the *anumeya* or *probandum*, because the term is apprehended at the time of grasping the connection (between the terms M and P); and that which is *already* apprehended cannot (as such) constitute the *probandum*—the thing that *is to be* proved. It is this fact that the Subject (*pakṣadharmin*) is the *probandum*, that is declared in the *Bhāṣya* by using the phrase 'not present to sense' (*tasya*[2] *sambandhagrahaṇasamaya eva gṛhītasyā 'nanumeyatvāt. Tad idam pakṣadharmiṇo 'numeyatvam asamnikṛṣṭagrahaṇena Bhāṣye darśitam*)".

On 25*a* Pārthasārathi says: "He distinguishes the two aspects, as *probandum* (*gamya*) and *probans* (*gamaka*) in this line. The being *probandum* (*anumeya*) is in respect of the character of having fire (*vahnimattvāt-*

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[1]Pārthasārathi explains *liṅgiliṅgaikadeśavattayā ubhayātmā*, i.e. it is both *probans* and *probandum* because it has the two aspects—(i) of M, and (ii) of being *a thing which possesses* M. In the former aspect it proves P. In the latter aspect it is that of which P is to be proved.—It is rather difficult to find a formula which will serve to characterise the subject in this latter aspect. You cannot precisely call it *sādhyadharmin*, 'that which *has* the property to be proved', because this phrase is almost self contradictory.—If we know that S *has* P, then P is no longer *sādhya*, *to be* proved. Later logic uses the formula *saṁdigdhasādhyavat*, to avoid this difficulty; but this formula is unsatisfactory too.—It is no doubt because of this difficulty that Pārthasārathi uses '*liṅgin*' here.

[2]*tasya ekadeśasya*.

manā), which is *asiddha* in the sense of *not* being known by any other source of knowledge (i.e. other than the inference itself) · the being *probans* (*gamaka*) is through the character of possessing smoke,—which *is* known by another source of knowledge" (i.e. by perception. The hill is perceived to have smoke, but the being on fire of the hill is to be inferred).

He introduces the next line with the question: "How then is this *anumeyaikadeśin*, or Subject *quâ probandum*, to be brought in (*upādātavya*) in the syllogism (*sādhanavākya*) "?

25*b*. *ataḥ pṛthag abhinno vā prayoktṝṇām vivakṣayā*

"It is expressed differently according to the intention of speakers; sometimes as apart from, and sometimes as one with, the terms ".

That is, you may indifferently express your inference in the form " the hill is fiery because smoky ", or in the form " there is fire in the hill because there is smoke there[1]."

Pārthasārathi explains: *pṛthag ekadeśābhyām vaiyadhikaraṇyena, abhinnas tābhyām sāmānādhikaraṇyena.*

—It is apparently merely a question of the *form* of the proposition If M and P are expressed as adjectives of S, it is said to be a case of *sāmānādhikaraṇya*. since when a thing is expressed as an adjective it is *eo ipso* referred to the substantive as its *locus*—the adjective being *samānādhikaraṇa* with its substantive. But two substantives are *vyadhikaraṇa*, different in respect of *locus*, because each is its own *locus*. When an adjective

[1]This latter will be the mode of formulation which Vātsyāyana had in mind when he said that *fire* is inferred by smoke The fire here is treated *pṛthak*,—as separate from the hill If however we say that what is inferred is 'fiery hill', we should be treating the hill and the fire as 'non-separate': for by turning fire into an *adjectival* form we are asserting *sāmānādhikaranya*

is predicated of a substantive, the relation is that of identity—*tādātmya, or abheda*[1], e g. in 'the hill is fiery'

26. *anityaḥ kṛtako yasmād dhūmavān agnimān iti dharmyabhinnam upādānam, bhedo 'trāgnir itīdṛśe*

"In such propositions as 'sound is transitory because it is a product', 'the hill being smoky is fiery', the predicates are stated as identical with the subject : whereas in such a proposition as 'there is fire in it', fire is something separate from the hill, and is not predicated of it by way of identity ".

Kumārila seems to say :—It is a matter of indifference whether you state the members of your syllogism 'in logical form' or not. That may be left to the taste and fancy of the persons syllogising (*prayoktṝṇām vivakṣā*). But in the verses which follow (and which are closely parallel to the lines from Dinnāga) he proceeds to point out that this does not mean that the *probandum* of the inference can be thought of as a mere 'P' *out of relation* to the Subject On the contrary, the *probandum* is S-as-qualified-by-P. Neither P alone, nor S alone, nor even S *plus* P, nor even the *relation* (as such) between

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[1]The implication is that there are other forms of predicate in which the relation is not necessarily identity and (presumably) the judgment that 'there is fire on the hill' would be an example of this —I am not clear on this matter I append the following notes which I happen to have preserved as given to me by my teacher in *Nyāya*, the late Paṇḍit Jīvanātha Miśra (i) *daṇḍavān puruṣa iti śābdabodhe abhedasambandhena daṇḍavattā eva viśeṣaṇatvam daṇḍavān puruṣa iti pratyakṣādau tu saṃyogenaiva daṇḍasya viśeṣaṇatvam* (ii) *ghaṭo nīla ity atra viśeṣaṇam nīlaḥ, viśeṣyo ghaṭaḥ tadubhayasambandhas tādātmyam* (= *abhedas*). *atra nīlapadam nīlavati lakṣakam abhedasambandhena nīlaprakārakaghaṭaviśeṣyakaśābdabodho bhavati*

This suggests that a judgment *expressed in words* (= *śābdabodha*) cannot but state a relation of *tādātmya* or *abheda*, i.e the logical form of proposition is necessarily subject . copula (of identity) . predicate · as in the formula of Western schools logic —But what Kumārila seems to say here is that this form is optional And this would seem to mean that a *proposition* can leave the predicate '*pṛthak*', i e not reduced to identity (*abhinna*) with the subject.

S and P, can constitute the thing to be proved Your conclusion need not be a proposition 'in logical form' joining P to S by a copula of identity (*tādātmya*, *abheda*), but it must be a judgment (*viśiṣṭajñāna*),—in other words S and P only constitute the *probandum* (or conclusion) in so far as they are related as qualification and thing qualified (*viśeṣaṇaviśeṣyatvam āpannau*)

27. *ekadeśaviśiṣṭaś ca dharmy evātrānumīyate*
na hi tannirapekṣatve sambhavaty anumeyatā

28. *na dharmamātram siddhatvāt, tathā dharmī, tathobhayam*
vyastaṁ vāpi samastaṁ vā svātantryeṇānumīyate.

29. *ekadeśasya liṅgatvam sādhyenānugamo 'sya ca*
dvayam ca na syād iṣṭam sat pakṣeṣv eṣu yathākramam

30 *anityatvādayo dharmāḥ kṛtakatvādayo na hi*
dhravinānugamo naiṣām nobhayasyobhayena vā

31. *sambandho 'py anupādānān nāmnā ṣaṣṭhyā pi vā mitau,*
na cāpy anugamas tena liṅgasyeha nidarśyate.

27 and 28 "It is S (*dharmin*) *as qualified by the aspect or term* (*ekadeśa*)*P* that is inferred : for without reference to this (*tad=dharmin*) there could be no *probandum* (*lit.*, the state of being *anumeya* is not possible). Neither the quality, P, alone, nor the subject, S, nor both of them, collectively[1] or distributively, can in itself be the thing to be inferred : because each of these things, in itself, was known prior to the inference."

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[1]They can be taken collectively without predicating one of the other—'hill-and-fire' Pārthasārathi points out that "*tayor vyastayoḥ samastayor vā anyonyāviśiṣṭarūpena nānumeyatvam*"

29. "Among these alternatives, if we take the cases in order (*yathākramam*) we find *either* (1) there would be no aspect of the *pakṣa* to serve as a middle term (*ekadeśasya liṅgatvaṁ na syāt*); *or* (2) there would be no universal accompaniment of the middle by the major (*sādhyenānugamo na syāt*); *or* finally (3) both requirements would be absent (*ekadeśasya ca liṅgatvaṁ, sādhyena cānugamaḥ*—these are the '*dvaya*', the pair of requirements) · although these requirements are desired to be present (*iṣṭaṁ sat*)".

i.e. taking the possibilities *yathākramam* —

(1) If our *anumeya* were 'non-eternality[1]', *kṛtakatva* would *not* be an *ekadeśa* of the *anumeya* 'non-eternality' so as to serve as the middle term of the argument for, as he puts the matter in the next verse,—30 (*a*). "The qualities, non-eternality, etc., *are* not the qualities, 'being a product,' etc, which are to serve for middle terms". [In plain English we cannot say 'non-eternality (of sound) *is* the quality of being produced'—we cannot say 'the mortality of Socrates is his manhood It is not. Mortality is mortality, and manhood is manhood *Men* are mortal, and mortals may be men · but that requires a different formulation].

30 (*b*) (2) If again our proposition were about the existence of sound[2] you could not formulate a major premise in which the middle, *kṛtaka*, was asserted as universally accompanied by this *anumeya*, i.e., by *śabda*. It would be absurd to say "all products are sound · like a jar" (*dhvanınānugamo naiṣāṁ. eṣām* means *kṛtakatvādīnām*,—middle terms like *kṛtaka*).

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[1]i.e if the *dharma* is taken to be the *anumeya*.

[2]i e if the *dharmin* were the *anumeya* Pārthasārathi says *śabdīstitvapratijñāyām* But it is impossible to formulate this theoretical possibility —in which the *dharmin*, sound, is also the *anumeya*—as an actual inference

(3) If again our proposition were about sound-and transiency[1], then *nobhayasyobhayena vā*,—which Pārthasārathi explains by saying " *na kṛtakatvasyobhayadharmatvam, śabdamātradharmatvāt* ". The meaning of Kumārila's words, confirmed by the phraseology of 29(*b*), *drayam ca na syād*, seems to be that " there would not be co-existence of both the requirements (*ekadeśasya lingatvam*, and *sadhyenānugamaḥ*) with both, i.e. with *dharma plus dharmin*, taken together as being the *anumeya* Pārthasārathi's comment shows how *ekadeśasya lingatvam* is precluded,—viz., *kṛtakatvasya śabdamātradharmatvāt*. You cannot say that "word and non-eternality are effects " because though 'word' *is* an effect, non-eternality is not And *sādhyenānugamaḥ* is also impossible, for we cannot say that " where there is *kṛtakatva*, there there is sound-and-transiency: as in a jar "—for the reason explained under (2) above.

31 (4) The fourth possibility is that the *relation* between the hill and fire, between sound and transiency, might be the *anumeya*. This is ruled out in verse 31 on the ground that the relation is not referred to in the inference either by using the word *sambandha* or by the use of a genitive (possessive) case—*parvatasyāgnih*[2], also on the ground that in the major premise (*nidarśana*) we do not say that the middle is universally accompanied by 'the relation between S and P.'

[1] i.e. if the *anumeya* were *dharmin plus dharma* Pārthasārathi says *śabdānityatvayoh sadbhāvapratijñāyām*

[2] Pārthasārathi says "it is not ordinary usage to say '*parvatasyāgnir asti*'—'there is fire of or belonging to the hill'—or to say 'there is *relation* of fire and hill' —But it is ordinary usage to say *parvate 'gnir asti*, i.e. to use the seventh or locative case-inflection here —What is the meaning of the insistence in all these passages (the fragment of Diṅnāga, the *Nyāyavārtika*, and the *Ślokavārtika*) on the fact that we never say the fire *of* the hill, though we do speak of fire *on* the hill?—The Indian grammarians hold that though there are *seven* case-inflections (*vibhakti*), only *six* essential relations of noun to verb (*kāraka*) are to be expressed in a sentence and these six find expression in *five* of the case-inflections. The six *kārakas* are *object* or *karma* (expressed by the second *vibhakti* =accusative case), *agent* (expressed by the instrumental or third case inflection where the verb is in the passive

32—34.

na cākāradvayam tasya śādhyasādhanabhāg bhavet
tasmād arthagṛthītatvān matubarthasya gamyatā
na svātantryeṇa mantavyā yathā daṇḍyādiśabdataḥ
viśiṣṭārthapratītau syāt sambandho nāntarīyakaḥ
viśeṣaṇaviśeṣyatvam āpannau drāv imāv ataḥ
gamyāv . . . .

"Nor has the *relation* the two aspects (so that) it could play the part both of *sādhya* and *sādhana* (as the genuine *anumeya* can do). Therefore the possessive affix *mat* (*parvato vahnimān dhūmavattvāt*) can only claim to be *gamya* or *sādhya* in so far as it forms part of the thing, and it is not to be considered such in its own right just as in knowledge of a qualified object derived from a word like *daṇḍin*, 'having a stick' ". (For, in this illustration, the stick is mentioned *prakṛtyā*, i.e as the principal thing, while the relation is only referred to *pratyayena*, i.e through the suffix Pārthasārathi, *ad loc*) "It is only where there is the thought of a *thing* qualified

voice, or by the verb termination where the verb is in the active voice,—for the first or nominative case-inflection is not considered to have a *kāraka*-function), *instrument*, *karana* (third or instrumental case), the '*dative*' or *sampradāna* of the action expressed by the verb (fourth or dative case), the '*ablative*' or *apādāna* of the action (fifth or ablative inflection), the *locative* or *adhikarana* of the action (seventh or locative inflection)

Thus the sixth or genitive case-inflection has no *kāraka*-function for it expresses the relation between nouns, and not between noun and verb So Pāṇini II iii 50 says *ṣaṣṭhī śeṣe*—"the genitive is used in other senses" which the commentators explain to mean senses other than that of the six *kārakas*, and other than that of the bare meaning of the noun (*prātipādikārtha*, which with gender and number is conveyed by the first or nominative inflection),—for instance the relation between a thing and its owner (*svasvāmibhāvādisambandha*).

The genitive then is the inflection proper to *mere* relation—*sambandha*—, i e to relations not integral to the *action* which is the life of the sentence-structure So Diṅnāga says in this fragment *ṣaṣṭhī śrūyeta tadvati* 'the genitive would be used of one thing *possessing* another thing'. We must suppose then that the position of those who held that what is inferred is the *sambandha* or relation between the hill and fire was *not* equivalent to putting the conclusion in the form 'fire is *on* the hill' for that would express a *kāraka*,—*adhikaraṇa*, location.

by properties that we can have inseparable connection of properties[1].

Therefore these two (*dharma* and *dharmin*, P and S) can constitute the *probandum* of the inference only when endowed with the condition of being qualified-and-qualification with respect to each other".

SECTION 4 UDDYOTAKARA'S CRITIQUE OF THEORIES OF THE ANUMEYA

[Translation of the discussion in *Nyāyavārtika*[2] (pp. 52—54)]

"Others give a different account[3] of the illustration which the *Bhāṣya* gives of *pūrvavat* inference, viz., that 'by means of that same smoke a man apprehends fire'[4] What precisely is it that a man apprehends

[1]*syāt sambandho nāntarīyakaḥ* Pārthasārathi says *sambandhas tu nāntarīyakatayā 'vagamyate*—'but the relation is understood as inseparable' There is parallelism with the language of Dinnāga's definition of *anumāna* as *nāntarīyakārthadarśanam*—fragment G It would seem that Kumārila is urging here the objection against *avinābhāva* which is urged by Uddyotakara also see below p 280 ff

[2]On this Vācaspati remarks *tatra Dinnāgadūṣitān kalpān, anyāmś ca vikalpān, Dinnāgasamarthitam ca kalpam upanyasya dūṣayati*—*NVT* p 120 l 18 "He refers to and criticises the alternatives criticised by Dinnāga, and other alternatives, and the alternative accepted by Dinnāga"

[3]The *Bhāṣya* (p 42) has suggested that the *vat* in *pūrvavat* is the *vatipratyaya* i e -*vat* in the sense of 'like', so that *pūrvavat* means *yathā pūrvam* *atha vā pūrvavad iti yatra yathāpūrvam pratyakṣabhūtayor anyataradarśanenānyatarasyāpratyakṣasyānumānam, yathā dhūmenāgnir iti*—"or else *pūrvavat* is the name applied where, of two things which have been (previously) perceived, we infer the one not now present to sense from seeing the other—'as before', as we infer smoke by means of fire" Uddyotakara first takes the 'as before' to apply to the *object inferred*—"as the object was experienced before in perception, so *just that same* object is now apprehended through inference" But, he says, others connect the 'as before' with the *thing through which the inference is made*, interpreting Vātsyāyana to mean that 'by means of *just that very smoke* which was previously experienced a man apprehends fire'—*tenaiva dhūmenāgnim pratipadyate*

[4]Dr Jhā misses the connection of thought because he ignores the *eva* here And the point of the discussion which now follows is obscured unless the connection here is realised The peculiarity of Uddyotakara's view of

through that smoke? Is it (a) fire, or (b) place, or (c) existence, or (d) fire-possessing place? Not fire : because a relation of property and property-possessor[1] is not possible between them,—that is to say, fire is not a property of smoke, nor is smoke a property of fire . and further because fire is already apprehended, and therefore cannot be the thing to be proved (*anumeya*) And the

inference is just this, that he refuses to admit that the smoke through which we now infer—whatever exactly it is that we infer—is the *identical* smoke of past experiences In order to elucidate this point he proceeds to raise the further question 'what exactly is it that we infer?' And the answer to this question which he finally gives seems to preclude the possibility of holding that the fire which we are said to infer is just exactly the fire of previous experiences So that the position is that neither the fire inferred nor the smoke through which we infer it can be *just* that smoke and *just* that fire which we have previously experienced What we infer is *this* smoke-as-qualified-by-fire and the means by which we infer it is again *this* smoke with all its concrete characteristics

This means that Uddyotakara definitely rejects the view of inference as based on a *vyāpti* of smoke by fire The formulation of a 'major premise' (where there is smoke there is fire) is only of use to those who admit that the smoke and fire of previous experience are the identical smoke and fire of this particular case But Uddyotakara's view is that we argue from *likeness* (*sādharmya*), and not from identity —That is, the *yathā* in *yathāpūrvam* does not signify identity, but likeness

This explains (1) the attack on *avinābhāva* embodied in the present passage, (2) the acceptance of inference from cause to effect, which if based on a *vyāpti* or connection or abstract characters would be *savyabhicāra*, i e. would involve an undistributed middle term If we are arguing from the cause in the concrete (not from mere clouds to impending rain, but from just these particularly-characterised clouds to rain) we can as well argue from cause to effect as we can from effect to cause

The whole thing may be otherwise expressed by saying that he substitutes *parāmarśa* for *vyāpti* as the nerve—the *karaṇa* or instrument—of inference The *parāmarśa* is the realisation that this particular case of M, *under the concrete circumstances*, must carry P with it He will have nothing to do with assertions, *in the abstract*, of M being always P.

[1] *dharmadharmibhāvānupapatteh* The principle here appealed to is stated by Vācaspati Miśra *NVT* p. 120 l. 20—*dharmeṇa hi dharmī pratipattavyo nānyathā* It is always a property-possessor SP that is apprehended through a property M, i e it is not P that is apprehended through M. Similarly Diṅnāga condemns the view that *dharmāntaraṁ meyam*,—that another *property* is what is inferred through M . and Kumārila insists that an *ekadeśin* is implied in Śabara's statement that from seeing one *ekadeśa* (M) we apprehend another *ekadeśa* (P), and in verse 35 states Vācaspati's principle in similar words—*sarvathā dharmino dharmo dharmeṇa tu avagamyate.* Socrates is mortal and Socrates is human · but mortal is not human, neither is human mortal. It is of this or that possessor of humanity that mortality is to be inferred.

same reasoning covers 'existence', and 'place',—the *existence* of fire, and *place*, are already apprehended.

"If again you say that place-as-possessing-fire is the *probandum*,—No! because the smoke is not the property of this[1].—You mean that fire-possessing place might be inferred through the smoke. But this is not the case. Why? '*ataddharmatvāt*'. That is, the smoke is not a property of fire-possessing place[2] (as such). Nor can it be said that *relation* of fire to place [*as such*] is unknown" (and therefore fit to be proved. It is already known that fire is *related* to 'place', i.e. has a local habitation).

(The opponent now answers. "Yes, but what is meant is that) '*This* fire-possessing place is the *probandum*'"[3].

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[1]In the next sentence Uddyotakara, *more suo*, amplifies in commentary-form the aphoristic brevity of the first statement—*na*, *dhūmasyātaddharmatvāt*. This is an excellent example of the numerous passage in which Uddyotakara conveys the impression of commenting on a citation In Dr Jhā's translation the second sentence reads like mere repetition of the first and the same impression of tautology is given in other passages where Uddyotakara *svoktaṁ vivṛṇoti* 'comments on his own statement' To readers of the translation these tautologies sometimes seem inexplicable, and confuse the train of thought

[2]Uddyotakara takes *agnimān deśah* first in the sense of *unspecified* fire-possessing place, place in general so far as fire-possessing The absence of a definite article in Sanskrit makes such misunderstandings always possible · and it is necessary to force one's opponent to say exactly what he means by taking his statement first in the impossible sense —But for the same reason there is ambiguity in Uddyotakara's answer *dhūmasyātaddharmatvāt*, which might either mean (as I have rendered it) that *the* smoke is not a property of fire-possessing place in general, or else that *smoke* is not so In the latter case the meaning of the retort is no longer obvious · for the opponent might say that smoke as such *is* a property of fire-possessing place as such · a statement which would be an *avinābhāva* or universal proposition Uddyotakara's criticism of such universal propositions is given below he rejects them. But as his refutation of the *avinābhāva* has not yet been given it is easier here to take *dhūmasyātaddharmatvāt* in the sense '*the* smoke is not a property of fire-possessing place *as such*'.

[3]This is Dinnāga's own view, and Uddyotakara now proceeds to reject it. But I think that what has just preceded is also directed against Dinnāga, and that Uddyotakara's point against Dinnāga, both here and in his criticism of the *trairūpya* (*anumeye 'tha tattulye*, etc) is that Dinnāga uses the term *anumeya* equivocally For the purposes of his *vyāpti* or major premise he takes 'fire' or 'fire-possessing place' in the unspecified sense

"This will not do, because this has not been seen. That is, you mean that the particular place is inferred as possessing fire. But the reasoner does not see this particular place—so that he cannot state 'this particular place is fiery': they would be meaningless words, and no more[1]" (The translator explains: 'the actual place from where the smoke is issuing is not seen by the observer'. And this is at least a possible explanation. The remainder of the translator's note is, I think, mistaken[2].—Uddyotakara's criticism is meticulous. The observer can particularise the place sufficiently without seeing *exactly* the spot from which the smoke is issuing. He *does* particularise it in calling it the hill: and he certainly sees the hill.)

of fire as such. That will expose him to the criticism just stated, if he takes the conclusion in this unspecified sense.

[1]The punctuation of the text is wrong. The passage should read *kevalam tu śūnyam abhidhānam uccārayati ayaṁ deśo 'gnimān iti* (*NV* p. 52 last line).

[2]If it is a mistake, however, the mistake is Vācaspati's, for the translator is following him in the second part of the note to p. 178 of the translation. See *NVT*, p. 120 (last two lines):—*na hy ayam evaṁvādī Diṅnāgo dhūmādhāraṁ deśaviśeṣam paśyati. na hy asya mate parvato nāma kaścid avayavī, yadādhāro dhūma upalabhyeta. kiṁtu paramāṇavah paramasūkṣmā atīndriyāḥ sarvatah. evam dhūmo 'pi tādṛśa eva. yathā vakṣyati—'sarvā grahanam avayavyasiddher' iti* (*NS* II. i. 34). "For he, is Diṅnāga who is expressing this view, does not see the particular place which is the *locus* of the smoke. For on his view wholes do not exist, and therefore there is no such thing as the mountain,—a whole which might serve as the *locus* of the smoke: but the 'mountain' is exceedingly minute imperceptible atoms: and the smoke too will be just the same. As the *sūtrakāra* puts it later (speaking from the *Bauddha* standpoint) 'there will be non-apprehension of everything, because wholes are not established as existing'." I doubt whether Uddyotakara meant this.—In any case it would only serve as an *argumentum ad hominem* against the *Bauddha*, and will not affect the position of those who believe in the reality of mountains and hold the present view. Vācaspati is conscious of this, and he therefore goes on to give the interpretation of Uddyotakara's argument which I have embodied in my rendering: "*yeṣām api deśabhedo 'vayavī darśanārhah teṣām api viyadvartinīṁ dhūmalekhām abhraṁlihām upalabhyānupalabdhadeśānāṁ nānumānasambhavah*.—"For those too who admit differences of place in the form of wholes which admit of being seen, an inference could not arise when they saw a streak of smoke in mid-air reaching up to the clouds without seeing any particular place (which might serve as *locus* of origin of the smoke)."—Uddyotakara's real objection is probably as given in the following footnote,—however we interpret the present paragraph.

"Nor can you say that it is smoke *as such* that brings about the apprehension of fire: or (if you do say this) then 'smoke as such' is what the observer sees; and the consequence of this will be that it is not the *particular* place that is inferred (as fiery)[1]."

SECTION 5 HIS REJECTION OF THE NOTION OF UNIVERSAL CONNECTION

In connection with the suggestion just made—that fire is inferred from smoke as such,—Uddyotakara proceeds to an examination of the notion of *avinābhava*, or inseparable connection, between smoke as such and fire as such[2]. The passage is particularly significant because it appears to define Uddyotakara's attitude towards

[1]This rendering is a conjecture, *arthāpatti*, derived from the impossibility of getting sense out of the passage in any other way that I can discover. It differs widely from Dr. Jhā's rendering "if he asserts the conclusion in the form 'this place contains fire', he makes an empty, meaningless assertion, specially because mere smoke (unperceived) cannot bring about the cognition of fire, and the *Bauddha* philosopher can never perceive the smoke (which, like everything else, is imperceptible),—for these reasons any *particular place* cannot be regarded as the object of inference" The suggestion that the *Bauddha* philosopher is incapacitated from seeing smoke comes from Vācaspati otherwise Vācaspati makes no comment on this sentence The Sanskrit is —*na ca dhumamātram agnipratipādakam dhūmamātre vāyam paśyati ato deśaviśeso nānumeyah* I think the argument is that, if Dinnāga argues (as he does) from a connection between smoke *as such* and fire *as such* in his 'major premise', he has no right to think of the smoke of the minor premise as *this particular smoke*,—and consequently no right to draw a conclusion about fire *in this particular* place Put as an objection against Aristotelian syllogism—

M in general is P in general

This is M in the particular

Therefore this is P in the particular—it amounts to a charge of *quaternio terminorum* (or rather a *quinio terminorum*). You cannot argue from a special M in the minor, and a general M in the major (This is recognised in certain cases by our schools logic in its rubric of 'fallacy of accident') —This difficulty seems to have weighed so heavily in Uddyotakara's mind that he was led to deny the function of the universal proposition altogether. Hence the attack on *avinābhāva* (=the universal proposition) which now follows

[2]See Keith *ILA* pp 104-105 Keith connects the passage at *NV* p. 56 with the present passage. His statement with regard to the former passage that "Uddyotakara carefully refutes a doctrine which attributes the name

the doctrine which is usually regarded as the outstanding contribution of Praśastapāda and Diṅnāga to the theory of inference.

NV p.53 l.2 "It may be suggested that smoke causes us to apprehend fire through *inseparable connection* (*avinābhāvena*). That is: there is an 'inseparable connection' between smoke and fire; and as a result of this a man comes to apprehend fire from seeing smoke.—This view is wrong, because every interpretation of it that can be given turns out to be impossible (*vikalpānupapatteḥ*). For what is meant by an inseparable connection between fire and smoke? Does it mean causal connection? or inherence [of both] in one thing, or of one thing [in them both]? or simple relation of the one thing to the other thing (*tatsambandhamātra*)? (1) Suppose the first alternative, that indissoluble connection of smoke and fire means relation of cause and effect. It is impossible, because this does not reside in that (*atadvṛttitvāt*): smoke does not reside in fire, nor fire in smoke; because each of these resides in its own (material) cause. For this reason the 'indissoluble connection' cannot consist in a relation of cause and effect between them[1]. (2) Nor is the second

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of syllogism to the demonstration of something as inseparably connected with something else", refers to Uddyotakara's criticism of the definition of *anumāna* (instrument of inferential knowledge) as *nāntarīyakārthadarśanam tadvidaḥ* (seeing something which is inseparably connected with something else, when the person who sees it has knowledge of the inseparable connection) (This definition is Diṅnāga's fragment G) But Uddyotakara confines himself to criticising the form of statement of this definition—the word *artha* is superfluous, the compound is an unjustifiable *karmadhāraya*, and yet cannot have any other sense, the qualification *tadvidaḥ* is superfluous So that the passage throws no light on Uddyotakara's own position. (Keith is mistaken in his statement that "Uddyotakara objects that, as on the Buddhist view everything is indissolubly related to everything else, the knowledge in question of a thing as indissolubly connected is no more than knowledge *sans phrase*, and not inference." See *Fragments from Diṅnāga*, p 22 and n. 1)

[1]The argument is baffling, because he ignores any kind of causation except *material causation* (*samavāyikāraṇatā*) Vācaspati Miśra says

alternative possible : (a) smoke and fire are not constituent causes of some one thing which resides in them as constituted effect : for a substance is not constituted by two heterogeneous things : (b) and the supposition of their both residing in a third thing which is their constituent cause, has already been set aside by saying that 'each of these resides in its own (material) cause'. (3) If it be said—the third alternative—that [at any rate] there *is* relation (*sambandhamātra*—relation without further specification) of smoke and fire, in that way too the inference is impossible. That is : How if the defendant contents himself with the assertion 'there is a relation[1] between smoke and fire'? The answer is that this view is not tenable,—we cannot infer relation[2] between smoke

that only material causation is considered because the other two kinds of causation will not be cases of 'inseparable connection'. Thus in the case of *efficient causation* it is not the case that wherever the effect is found the efficient cause is found (*na kāryasattā nimittakāranasattayā vyāptā na hi yadā yatra vā paṭas, tadā tatra vā kuvindaḥ*—"it is not true that wherever and whenever there is cloth, there and then there is a weaver" And in the third kind of causation, that of *asamavāyikāranatā* (the relation through which the properties of the threads are the cause of the properties of the cloth, for example), it is equally untrue that wherever the effect is found its *asamavāyikāraṇa* must be found (*na hi yadā yadā saṁyogas, tadā karma*,—"it is not the case that whenever there is contact the effect of the contact is produced". Jhā takes this in the particular sense "the cloth is present also when the contact with the loom is *not* present")

[1]It is important not to misunderstand the two phrases *tad apy anumātum na śakyate* and *na sambandhānumānam* It is not conceivable that Uddyotakara should have spoken of an 'inference' of *universal* connection between fire and smoke. So far as I am aware there is nowhere in Indian logic the notion that 'induction' or generalisation is an inferential process.

[2]Vācaspati glosses *sambandhamātra* by *saṁyoga* that is, he understood the present view to assert that smoke and fire are two substances *in contact*. Vācaspati states the 'form' (*prayoga*) of the inference in the shape 'there is relation of smoke and fire, as a result of smoke' (*asti sambandho 'gnidhūmayor dhūmad iti*), i e from smoke we infer contact-with-fire Now this implies a 'major premise.' 'Wherever there is smoke there is contact-with-fire'.—Uddyotakara's point is that we have had no such experience as would justify this *vyāpti* of smoke by *agnisaṁyoga*, '*contact-with-fire*'. For we often have experience of *anagnika-dhūma* which then means smoke not *in contact with* fire

and fire, because no-such relation has been apprehended: that is, because we see smoke also in the absence of fire[1].

(A *Bauddha* however, as Vācaspati points out, does not believe in substance: and therefore he would not think of the relation between fire and smoke as a case of *saṁyoga* between substances[2], but—like all other connections, e.g. that of colour and tangibility—as a case of *ekasāmagryadhīnatayā niyatasāhacaryam*, 'determined concomitance through dependence on one and the same aggregate of conditions'. Uddyotakara therefore proceeds to ask whether the *Bauddha's* 'concomitance' will provide for *avinābhāva* or universal connection).

The opponent now suggests that "the relation between fire and smoke will be 'concomitance',—like the concomitance between the two qualities of colour and tangibility in what are supposed to be substances". Uddyotakara replies.—"This will not serve your purpose. because the two are not always *found* together (and so mere concomitance does not amount to universal connection, *avinābhāva*). Smoke is sometimes seen without fire, and fire without smoke, and so (the experience of) their connection is not invariable, and therefore 'concomitance'—as implying universal connection—cannot be asserted[3]."

[1]We must not understand Uddyotakara to be maintaining the rather desperate position that smoke can *exist* without fire. Keith takes this view of the passage *ILA* p. 105 "Uddyotakara admits that there are exceptions to the rule of indissoluble union even in the case of smoke and fire, since not only does fire occur without smoke, as is generally admitted, but also smoke without fire, which contradicts the fundamental assumption of the stock syllogism of the schools" It also contradicts the postulates of our experience, and would certainly come under the ban of Udayana's principle: *vyāghātāvadhir āśankā*—doubt finds a limit in contradiction of experience and, more particularly, it contradicts Uddyotakara's own doctrine of the *liṅgaparāmarśa* See further footnote 3.

[2]*NVT* p. 121 l. 18—*na hi Bauddhasiddhānte dravyaṁ nāma kiṁcid asti yatra rūpasparśau samavetau, kiṁtu ekasāmagryadhīnatayā niyatasāhacaryau tathā vahnidhūmāv api bhaviṣyata ity arthaḥ.*

[3]But does not this amount to what was characterised above as 'the desperate position that smoke can *exist* without fire?' I do not think that it

"The formula 'where there is smoke there is fire' is rejected by the very same reasoning[1]. And there is no other way of interpreting the 'inseparable connection' of smoke and fire (except those mentioned).—Therefore it is not true that 'fire is inferred through smoke.' "

SECTION 6. HIS OWN VIEW OF THE *ANUMEYA*

"Does it not contradict common experience to say that we do not infer fire through smoke?—There is no such contradiction (replies Uddyotakara): what we infer is that the smoke has fire *as its property*; and we infer this through the nature of the smoke (*dhūmaviśeṣeṇāgniviśeṣaṇasya dhūmasya pratipādyatvāt*) —But (it may be asked) how is fire a 'property' of smoke?—The answer is . when it presents itself as a quality (*yadā guṇabhūto bhavati*). The *probandum* is 'smoke-as-fiery' and it is proved or inferred through the specific nature of the smoke (*dhūmaviśeṣeṇāsādhāraṇenānumīyate*). For both are at that time present to sense—the smoke, and the characteristics of it such as its forming an unbroken mass moving upwards And these characters of the smoke, as observed in it,[2] bring about the inference of a char-

does His words are *anagnir dhūmo dṛṣṭo 'dhūmaś cāgnir ity ubhayam vyabhicāri tasmān na sāhacaryam* *Sāhacarya* has been so emptied of content by the *Bauddha* that the only shred of meaning left is 'togetherness in space or time'. Now, as a fact, there is no such togetherness smoke and fire are often experienced separated in space and time as when the smoke continues *after* the flame has vanished

[1]This '*yatra dhūmas, tatrāgnih*', is Praśastapāda's *vidhi* or formula for the *nidarśana* or *udāharana*, the third member of the syllogism See *PBh* p. 205 l. 10 And Uddyotakara is referring to Praśastapāda's view in this sentence. Vācaspati explains by saying · *tasyāpi sāhacaryaviśeṣatvāt*,—"this, too, is a form of the 'concomitance' doctrine."

[2]Elsewhere, when he is analysing a concrete argument, we find an insistence on the *individuality* of the *probans* · for example he says that we can infer impending rain (effect)—not indeed from clouds as such—but in the form 'These clouds will bring rain,—because they are rising, being, as they are, accompanied by deep rumbling, having many lines of cranes

acter not known (directly) to the observer. In the case of every object that is a *probandum* (*sarvasyānumeyasya vastunaḥ*), the subject of the characters and the character that brings about the conclusion (*dharmī pratipādakaś ca dharmaḥ*) are known. For instance (in the inference 'sound is transitory, because a product') sound is known as what it is, and the fact that it is a product is known (*śabdasyātmasattā prasiddhā kṛtakatvaṁ ca*): but the character consisting in being transitory is not known (*dharmas tv anityatvalakṣaṇo 'prasiddha iti*). And it is this (latter character) that is inferred as a qualification of that (i.e. of sound). (*Tadviśeṣaṇo 'yam anumīyata iti.*)[1]

Misunderstanding of Uddyotakara's view is easy. It is said that Uddyotakara taught that from smoke we infer not fire, nor place, nor fiery place,—but fiery smoke. But Uddyotakara taught no such ineptitude as this, as a

flying through them, flashing with lightning,—like other rain clouds perceived in the past' (Jhā's translation of *NV* p 49 l 17) He is here justifying the argument from cause to effect—which is invalid in the abstract, but on Uddyotakara's view of the *probans* as concrete we can just as well argue from cause to effect as we can from effect to cause Cause and effect, seen within the individual whole of which they are essential aspects, are completely reciprocal

[1]Uddyotakara's view of inference is essentially a protest against an abstract formulation of the connection of M and P resulting in a correspondingly abstract conception of S His point is that *in the first place* (1) there is no meaning in the assertion of a universal concomitance of characters (*dharma*) in the abstract It is impossible to assert such connection in any intelligible sense,—*vikalpānupatteḥ*, because in any sense which you may try to assign to it it is meaningless M and P, the *dharma's*, simply fall apart if you abstract them from S, their *dharmin*. And, *in the second place*, (2) the subject or *dharmin*, S, must be the subject to which those *dharmas*, M and P, essentially belong. In the inference of "fire from smoke" (to adopt the ordinary but inaccurate phraseology which Uddyotakara is criticising here) the hill is *not* the essential S or *dharmin*. What the *essential* subject of an inference is in fact a difficult question in each case; and Uddyotakara may be wrong in his analysis of this particular set of facts when he takes 'smoke' as the *dharmin* But it is difficult to deny the principle on which his criticism is based The principle is that you must see M and P essentially connected in and through a system S, before your inference can reach demonstrative certainty If you make M and P abstract universals, then S becomes an abstract particular with which P can never be connected, and P loses all connection with M at the same time

general answer to the question, 'What is the *anumeya?*' He is dealing here with a particular case—as Vācaspati Miśra points out: the case of two things (smoke and fire) happening to co-exist in a third thing (the hill), to which their relation is *accidental*. And in such a case it can happen that the third thing (the hill), which is so to speak the *accidental dharmin* of these *dharma's*, may not be present to sense: and then it becomes plain that the *accidental dharmin* is no essential part of the *anumeya*: so that Diṅnāga's statement that 'fiery place' is the *probandum* is seen plainly in this crucial instance to misrepresent the essential nature of a *probandum* The *essential dharmin* of the inference is just "*this particular smoke*"—the individual case in which both characters find *essential* connection. Uddyotakara is not trying to banish the S or Subject of an inference: on the contrary he explicitly says that there can be no inference without a *dharmin—Sarvasyānumeyasya vastuno dharmī pratipādakaś ca dharmo prasiddho bhavati* (*NV* p. 54 l. 1) He insists not less, but more, than Kumārila, that the inference involves an *ekadeśin* as well as two *ekadeśa's*. But he insists further, as against Diṅnāga, that the real *ekadeśin* or minor term of an inference is not something accidental to the *ekadeśa's* In the case of an inference such as 'sound is transitory, because a product' Uddyotakara would not say that the *anumeya* is 'transitory product': he would say, what Diṅnāga or Kumārila would say, that the *probandum* is the transitoriness of *sound*. In this inference sound *is* the essential *dharmin:* it is in the *ātmasattā* of sound—in sound as being sound—that the two characters inhere,—and by so inhering are essentially connected. If the characters are abstracted from their *dharmin* they fall apart. For their connection is in the concrete, and not in the abstract. Therefore to state the *vyāpti* as Diṅnāga and Praśastapāda state it, i.e. as an *avinābhāva* or inseparable connection of the

dharma's or *ekadeśa's* (M and P) in the abstract amounts to a false abstraction. The true nature of inference can only be represented when it is formulated as depending, not on a major premise stating an *avinābhāva*, but on a *parāmarśa* or realisation of characters as connected in the individual.

SECTION 7 KUMĀRILA ON THE FORM OF THE CONCLUSION

(*Ślokavārtika*, *Anumāna pariccheda*, *verses* 34—48)

Having established his own view that the *probandum* is constituted by the Subject and the Property after they have come into the relation of qualification and thing qualified with respect to each other, Kumārila, in the first part (verses 34—48) of the present passage, raises a further question—which of these is the thing qualified and which the qualification? That is : do we infer the hill as qualified by the fire? or may we infer fire as qualified by residence in the hill[1] ? In other words, must my conclusion take the form 'the hill is fiery'? or may it also take the form 'fire has the qualification or predicate of residence in this hill?'

[1]Cf p 261 *supra* The distinction exactly corresponds to Vātsyāyana's distinction between *dharmaviśiṣṭo dharmī* and *dharmiviśiṣṭo dharmaḥ*

It is difficult (and precarious) to translate an Indian controversy into our thought-forms. But this question does seem parallel to our question whether the fourth figure is a justifiable form of syllogism. From the knowledge that smoke is accompanied by fire and the perception of fire on this hill must I conclude in the form 'This hill is fiery' (BARBARA); or may I optionally conclude in the form 'Some fiery thing is this hill' (BRAMANTIP)?

(The barbarous form of the latter conclusion is of course alien to Indian thinking, which—rightly as it seems to me,—ignores the 'particular' proposition.)

(a) *Verses* 34—48.

. . . *aṅgāṅgibhāvas tu kaiścid iṣṭo vikalpataḥ*
sarvathā dharmiṇo dharmo dharmeṇa tv avagamyate.

34 b. "Some however think that the relation of qualifier and qualified is optional: although in every case it is a quality *of a subject* that is apprehended through a *quality* (of that subject).

viśeṣaṇaviśeṣyatve na viśeṣo 'vadhāryate.

35 b. "The distinction between being the qualification and being the thing qualified is not a fixed distinction".

Comment. *aṅgāṅgibhāva* must here mean *viśeṣaṇa* and *viśeṣya*. Dr Jhā accordingly translates the first line: "The relative predominance of these two is by some people held to be optional". It does not matter whether you make 'this hill' the subject or *viśeṣya*, qualified by 'fire' as predicate-notion or *viśeṣaṇa*· or whether you make 'fire' the subject-notion, qualified by (residence in) 'this hill' as predicate-notion.—But, whichever form of statement you adopt, it will remain the fact that the hill is the *dharmin* of which one character or *dharma* (fire) is inferred through another character or *dharma* (smoke). *Dharmin* and *dharma* are fixed notions, though *viśeṣya* and *viśeṣaṇa* are not.

36—38*a*.

tatrottaraṁ vadanty anye "yadi dharmī viśeṣaṇam
hetudharme na sambandhas tasyāprādhānyataḥ sphuṭaḥ.
pradhānatvād dhi dharmeṇa sambandho vākyato bhavet,
tatrāsambhavataḥ paścat kalpyo 'sau dharmiṇā saha,
dhvaner ity atha vā vācyam. anvayasya tu darśane
bhedopāttasya dharmasya guṇabhāvo na duṣyati".

36. a. "Others reply :[1] if the property-possessor or *dharmin* is taken as the
36 b. predicate notion or *viśeṣaṇa*, then, because the *dharmin* is no longer the leading conception, the connection would not be plain in the case of the *probans*-property,[2] because the *dharmin* is not the leading conception or subject in the 'Proposition'.

37 a For, as a result of the structure of the syllogism, the connection (of the middle) would be with the '*dharma*', as that becomes the leading conception (in the 'Proposition')

37 b. And, since connection with the *dharma* is not possible, the relation of the middle will have to be conceived
38 a. subsequently as together with the '*dharmin*' : or else the phrase 'of sound' will have to be added to the statement of the middle.—As to the grasping of the 'major premise' there is no difficulty in the fact that the *dharma* has formed the adjectival concept in the proposition : for it is separately stated in the major premise."

Comment. The view under consideration is that, in the argument 'sound is transitory, because a product', the 'proposition' (or, which is the same thing, the conclusion) may take the form 'transitoriness resides in sound'. As Pārthasārathi Miśra

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[1] I take Kumārila as accepting this view

[2] It is necessary to read a negative into this line, 36b, as Dr. Jhā does (without comment) in his rendering Read—*dharme na* for the textual *dharmeṇa*.

phrases it, in the Proposition we should have *anityatvaṁ śabdagatam* (instead of the direct and usual form *śabdo 'nityaḥ*, 'sound is transitory') —But the second member of the syllogism, the *hetu*, is *kṛtakatvāt*,—'on account of being a product'. The connection of this will naturally be with the concept that is the *subject* of the first member of the syllogism. If we say 'sound is transitory on account of being a product' all is clear. 'being a product' is seen to be a predicate of sound. If however we say 'Transitoriness resides in sound, on account of being a product', the structure of the sentence is no longer transparent. we shall have to explain it by saying 'on account of its (i.e. *sound's*) being a product'. The relation (*asau = sambandhaḥ*) of the character of 'being a product', since it is impossible (*asambhavataḥ*) in 'transitoriness' (*tatra = anityatve*)[1] must either be understood (*kalpya*) by an afterthought (*paścāt*), as being with the thing that possesses transitoriness, i.e. 'sound'; or else the relation to 'sound' must be explicitly *stated* (*vācya*), by adding the word '*dhvaneḥ*' (i e *śabdasya*) to the statement of the reason '*kṛtakatvāt*', which will then become *śabdasya kṛtakatvāt*—'on account of sound's being a product'.

The concluding line and a half are thus interpreted by Pārthasārathi Miśra: "It may be objected that" (when the proposition—or conclusion—is stated in the usual form 'sound is transitory') "the universal statement 'whatever is a product, is........ ' would, when the occasion for stating it arises" (*darśanavelāyām* i. e. at the time of stating the third member of the syllogism) "be understood as a connection with just 'sound', which plays the part of leading concept in this form of the Proposition,—instead of being understood as a connection of the middle term with the character 'transitoriness',—

[1] i e The sentence *cannot* mean 'on account of transitoriness being a product'

which character has been stated in the Proposition as a predicate-concept (*guṇabhūtenānityatvena*[1]—i.e., *anityaḥ śabdaḥ* is a proposition in which *anityatva* figures in the adjectival form of *anitya*). The author's answer to this objection is that the difficulty does not arise · because as a matter of fact in the third member of the syllogism —which has the form 'whatever is a product is *transitory*'—the character 'transitoriness' is *mentioned again;* so that there can be no possibility of misunderstanding *what* is universally connected with the middle term (i. e. no room is left, in the accepted formulation of the syllogism, for the suggestion that the charge of failure of transparency of connection can be brought against the third member of the syllogism, on the usual formulation of the proposition as 'sound is transitory'.—The critic of the formulation 'transitoriness resides in sound', has said that this formulation prevents the *second* member from having a transparent meaning The retort is that, on the usual formulation, the *third* member fails to have a transparent meaning · for the syllogism will then run ·—

Sound is transitory,

Because.. ....is a product,

And whatever is a product is........ ...

If you say that the blank in the second member must be filled in as 'sound' you ought to say that the blank in the third member must be similarly filled in—so that your 'universal' takes the absurd form 'whatever is a product is sound'.—The reply is there *is* no blank to fill in, in the accepted formulation of the third member, which explicity mentions *transitoriness* as universally connected with the characters of ' being a product').

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[1]Cf Uddyotakara's phrase (*NV* p 58 l. 19) *kathaṁ punar ayam agnir dhūmaviśeṣaṇaṃ bhavati? yadā guṇabhūto bhavati* 'Fire' is a qualification of 'smoke' (in the conclusion as stated by Uddyotakara, viz , 'this smoke is fiery') in the sense that it is stated as an adjectival concept predicated of smoke.

39-48a. *Agner deśāviśiṣṭatve na caitat pakṣalakṣaṇaṁ.*
viśiṣṭatā 'sya deśena bhaved evaṁprakārika :—

40 *yo 'gniḥ so 'sti kvacid deśe, yo dṛṣṭo yatra tatra vā agnih pūrvānubhūto vā deśamātreṇa saṅgataḥ.*

41. *yo 'gniḥ so 'nena yukto vā, yo dṛṣṭo 'nena so' tha vā yo 'yaṁ sa deśamātreṇa yuktaḥ, pūrveṇa vā 'py ayam,*

42. *etaddeśaviśiṣṭo vā yo 'yam agnir. itīha tu pūrvayoḥ siddhasādhyatvaṁ, pareṣu syād viruddhatā.*

43. *vyāptir anena deśena sarvāgnīnāṁ na yujyate, nāpi pūrvasya, nāpy eṣa vahniḥ sarvair viśiṣyate*

44. *deśaiḥ, pūrveṇa vā 'py asya na deśena viśesyatā. etaddeśaviśiṣṭo 'yam ity etat kathyate katham?*

45. *yadā deśānapekṣo 'gnir nāyam ity avadhāryate, agneḥ pūrvataraṁ cātra deśa evāvadhāryate,*

46. *tajjñānakālabuddhaś ca na deśaḥ syād viśesaṇaṁ. deśasya parvatādes tu svarūpe pāvakād ṛte*

47. *gṛhīte 'gniviśiṣṭasya punarjñānam na duṣyati. tasmād dharmaviśiṣṭasya dharmiṇaḥ syāt prameyatā :*

48. *sa deśasyāgniyuktasya.*

39 a. "When 'fire' is *not*[1] taken as the thing qualified by 'place' (i. e. if we reject—as we do—the view that the proposition, 'this place or hill is fiery', may be taken in the form 'fire resides in this place'), the various possible interpretations of the meaning of the proposition which we now proceed
39 b. to give will *not* apply. When 'fire' *is* taken as the subject qualified by

[1] *agner deśāviśiṣṭatve* Dr. Jhā has overlooked the negative prefix in the compound, or amended it? Kumārila now takes as his illustration of inference another stock example—"this hill is fiery on account of the possession of smoke".

'place', the Proposition would admit of the following interpretations[2] :—

40 a. (i) Fire in general is somewhere or other (i e. connected with space in general).

(ii) The fire that is seen is wherever it has been seen.

40 b. (iii) Previously experienced fire is connected with place, as such."

Comment. Kumārila says of the first two alternatives that they both pretend to prove what is already known.—Pārthasārathi explicitly calls the alternative next mentioned the *fourth*, and he calls the alternative mentioned last of all the *eighth*. In his introductory comment to the passage he says that the first and second prove the already known, while the *last five* are contradictory . and his comment makes the *fourth* the first of the five contradictory ones. There is thus a very pretty confusion as to the number of the alternatives, —a confusion further confounded by the fact that the text (as we have it) speaks of *six* alternatives in the first sentence of Pārthasārathi's comment. Dr. Jhā renders the first two verses so as to give *two* alternatives—"(i) The

[2]They are not *six*, as a corruption in the text suggests · nor *seven* as Dr. Jhā makes them The word *saṭsu* in Pārthasārathi's comment *ad loc.*—*eteṣu ṣaṭsu prathamadvitīyayoḥ siddhasādhyatvam, uttareṣu pañcasu pramāṇāntaravirodhaḥ*—is clearly a mistaken reading, perhaps due to the substitution of *ṣaṭsu* for *satsu*. The context itself might seem to indicate the number seven : for it states that the *first and second* interpretations take as the thing to be proved something already known, while the *latter five* involve contradiction But later on Pārthasārathi explicitly calls the last the *eighth* —The one which I have numbered (ii) really contains two possibilities, one of which = the one numbered (viii).

fire that has been seen in some place or other exists; (ii) the pre-experienced fire exists in space." His third is the one which I number, and which Pārthasārathi calls, the fourth.—The appeal must lie to Kumārila's actual words :—

yo 'gniḥ so 'sti kvacid deśe yo dṛṣṭo yatra tatra vā

agniḥ pūrvānubhūto vā deśamātreṇa saṅgataḥ

It seems to me that the double use of *yaḥ* and of *vā* indicates three alternatives, and that the *yo 'gniḥ* here clearly means fire in general—as it does admittedly in the fourth (Dr. Jhā's third) alternative

There are *nine* possible alternatives, and it must be presumed that Kumārila had them all in mind :—

a. fire as such,	(i) a + *a*	Nine possible permutations
b this fire,	(ii) a + *b*	
c that fire,	(iii) a + *c*	
may be qualified by —	(iv) b + *a*	
a. place as such,	(v) b + *b*	
b. this place,	(vi) b + *c*	
c. that place.	(vii) c + *a*	
	(viii) c + *b*	
	(ix) c + *c*	

Two of these are objectionable under the rubric of *siddhasādhyatva*, as Kumārila says: namely, his first two :—"Fire as such resides in place as such"; and "that fire resided in that place" (a + *a* and c + *c*). But there is also a third one which might seem to come under this objection, viz., that this fire resides in this place, b + *b*. This however Kumārila mentions last of all, as being the natural interpretation of the fourth figure conclusion: and he therefore treats of it in a special argument. It is the eighth of his list. But he probably meant to include it, together with his no. (ii), in the phrase *yo dṛṣṭo yatra tatra,*— "an experienced fire resides wherever it is ex-

perienced"; which means both that "that fire resides in that place", and that "this fire resides in this place". He uses a phrase which means both because he does not want to specify here the latter interpretation, which is to be treated later.

But in any case there are only five others mentioned —all objectionable as being contradictory, viz., Nos. (iii) to (vii) in his list. And Kumārila seems only to specify *four* of these as contradictory, viz , (iv) to (vii), forgetting (iii) although he has mentioned it One possibility he does not even mention, viz , "fire as such resides in that place", a+c: thus making the total *eight* instead of *nine*. How are we to explain these two apparent defects in his treatment?—I cannot offer any explanation why he does not specify as contradictory his no (iii), "that (past) fire resides in all places", c+*a*.—The apparent *omission* of the alternative "fire as such resides in that place" may be explained by supposing the phrase *yo 'gniḥ so 'nena yukto vā* to cover both interpretations—"fire resides in that place ", a+*c*, as well as "fire resides in this place," a+*b;* both interpretations being rejected as self-contradictory in the single phrase *vyāptir anena deśena sarvāgnīnāṁ na yujyate*. We shall then have all the nine possible interpretations mentioned.

41 a. (iv) "Fire is connected with this place.

(v) Fire that has been previously experienced is connected with this place.

41 b. (vi) This fire is connected with place as such.

(vii) This fire is conected with a former (i. e. previously experienced) place.

42 a. (viii) This fire is qualified by this place.

42 b. The first pair of interpretations take as that which is to be proved something already known, while the later ones involve contradiction".

Comment Kumārila says nothing further about the alternatives which involve *siddhasādhyatva* 'setting out to prove what is already known' : he now shows how contradiction is involved in the latter alternatives.

43 a. "There cannot be connection of
43 b *all* fires with this place, nor yet of the previously experienced fire, nor can this fire be qualified by all places;

44 a. nor again can this fire be qualified by a previously experienced place".

Comment This rejects alternatives (iv), (v), (vi) and (vii) No mention is made of alternative (iii).

44 b. "As for the alternative that 'this fire is qualified by this place' how can this be asserted?

45 a. For fire without reference to place is not called 'this'.

45 b. And here it is the place that is cognised before the fire · and

46 a. the notion of the 'place' comes into consciousness at the time of the thought of '*this* fire', and so cannot be predicated of this."

Comment. This disposes of alternative (viii). The text in this line reads *taj-jñānakālabuddhaś ca na deśaḥ syād viśeṣaṇam.* Pārthasārathi glosses thus: *tad asau vahniḥ—jñānakāle 'vabuddhatvān na viśeṣaṇam.* The point made is that if 'this fire' = fire on this hill, then it will be mere tautology to assert 'the fire on this hill is qualified by residence on this hill': and this is a just criticism

46 b. "But since the place—the hill or whatever it may be—has been ap-
47 a. prehended without the fire there is no difficulty about having a second apprehension of it as qualified by the fire

47 b. Therefore the *probandum* is the property-possessor as *subject* with the property *predicated* of it:

48 a. that is to say, in the argument under consideration the *probandum* is the place-as-qualified-by-the-fire".

Comment The conclusion is that we must not take 'fire' (the *dharma*) as the *viśeṣya* or subject of the Proposition or Conclusion, and 'hill' (the *dharmin*) as the *viśeṣaṇa* or predicate: in other words, we must not conclude—in the form *Bramantip*—that fire is qualified by residence in this hill. And the principal argument for this conclusion is the difficulty which is asserted to exist in finding a reasonable meaning in 'some fiery thing is this hill'—or rather for the Indian equivalent of this solecistic utterance, viz., 'fire is qualified by residence in this hill'. No such difficulty is to be found in the normal conclusion 'this hill is fiery'.—But perhaps after all there are arguments in which the conclusion in *Braman-*

tip is natural. The argument which concludes to fire on the hill is certainly not one of these naturally fourth figure arguments, the reason being that we are not here starting from the question "In what places is fire to be found?". But suppose a man looking for places in which, say, gold is likely to be found: suppose him to know that places having the characters XYZ have produced gold: and suppose him to perceive these characters in a spot S. Starting from the question "In what places shall I find gold?" his subject or *viśeṣya*, i. e. his natural minor term, will be 'places likely to bear gold': and this relatively indeterminate notion will become determinate in the inference through a *viśeṣaṇa* or predicate, i. e. natural major term, consisting in 'the spot S.' Therefore the natural expression of his movement of thought will be:—

Gold will be found in this place,

For this place has the characters XYZ,

And places having the characters XYZ have to my knowledge borne gold.

S is P,—for P is XYZ, and XYZ is S=BRAMANTIP. Or, in the Indian formula *suvarnam taddeśaviśiṣṭam, īdrśalaksaṇavattvāt (tasya deśasya), purvānubhūta-deśavat—yatra yatra īdṛśalakṣaṇavattvam tatra tatra suvarnaṁ dṛṣṭam*. Exception has been taken to the bracketed insertion *tasya deśasya* (see verse 36 b.),—and this is, perhaps, awkward in the Indian formulation. No such difficulty however is felt in the Aristotelian[1] formulation; and it is not a serious objection

[1]Aristotle recognises the Second and Third figures in the Prior Analytics but not the Fourth, as such Ross states a reason (W D Ross, *Aristotle*, 1923, p 35) "If his *fundamentum divisionis* of the figures had been the position of the middle term he would have had to recognise as a fourth possibility the case in which it is predicate of the major premise

Kumārila does not reject the fourth figure form of conclusion (*dharmiviśiṣṭo dharmaḥ*) on grounds on which

and subject of the minor But his *fundamentum divisionis* is the *width* of the middle term in comparison with the extremes, and here there are only three possibilities it may be wider than one and narrower than the other, wider than either, or narrower than either" —These possibilities, however, only schematise into 'figures' on the assumption that the predicate is always wider than the subject,—an assumption (inaccurate in itself) which *at once introduces* the differences in position of the 'middle' Besides, there are four possibilities, even if width is taken as the *fundamentum divisionis*, viz. —

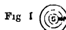
Fig I  (i) M wider than S but narrower than P.

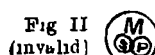
Fig II (invalid)  (ii) M wider than either

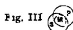
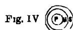
Fig. III  (iii) M narrower than either, and

Fig. IV  (iv) M narrower than S but wider than P.

The last will be the rubric of the argument "this place has the characters XYZ, and places having the characters XYZ are gold-bearing places, therefore one gold-bearing place is this place" = P is M, M is S, therefore S is P

The fourth figure is not the first figure read backwards There is a real difference symbolised by the exchange of S and P in the diagrams for Figs I and IV This difference may be expressed by saying that while Fig I determines the attributes of a subject, Fig IV determines the subject of an attribute In the Fig I the subject (*dharmin*) is the *logical* subject But in Fig IV the quality (*dharma*) is the logical subject, S, or *viśeṣya*

Of course these circles misrepresent thought-processes and the Indian phraseology of *dharmaviśiṣṭo dharmī* and *dharmiviśiṣṭo dharmaḥ* is more suggestive of the real problem of syllogistic figure, which has little or nothing to do with the extension of the terms or the position of the middle The important question is whether it is possible to predicate the *dharmin* of the *dharma*.

it might reasonably be rejected[1]. It is not clear that no reasonable interpretation can be found for the statement that 'fire is qualified by (residence) in this place'.

SECTION 8. KUMĀRILA'S REFERENCE TO UDDYOTAKARA'S VIEW OF THE *ANUMEYA*

(*Slokavārtika, anumānapariccheda*, verses, 48—50)

48a—51a . . . *Dhūmasyānyaiś ca kalpitā*

Nanu śabdavad eva syāl lingagamyaṁ viśeṣaṇam ·

Naivāṁ, na hy atra liṅgasya śaktyanekatvakalpanā,

Na ca tasyānumeyatvam, viśeṣyaś cāvadhāritaḥ,

Viśiṣṭatvena cājñānāt tanmātrasyānumeyatā.

Nanu dhūmaviśeṣyatve hetoḥ pakṣaikadeśatā.

Naitad asti, viśeṣe hi sādhye sāmānyahetutā.

[1] If it is possible to predicate the *dharmin* of the *dharma*, then a 'fourth figure' conclusion would seem to be possible. Perhaps the general question of its possibility or justification cannot profitably be discussed without a prior examination of the concept of the metaphysical *dharmin*, and of its relation to the logical subject or *viśeṣya*,—an examination which I have not met with, or have failed to recognise as such, in Indian logical works.

But this much perhaps may be said, that Kumārila's rejection of the 'fourth figure' conclusion is not well-grounded. For the natural interpretation of a conclusion which predicates *dharmin* of *dharma* would be Kumārila's No IV (see p 295 *supra*) "fire as such is qualified by this place" (a + b, in the scheme on p 294 *supra*). Kumārila summarily rejects this as self-contradictory · but only because he begs the question by understanding "fire as such" to mean "all particular cases of fire." But to *particularise* fire in this way is already to assign to it its *dharmin* or *adhikarana* and this has not yet been done (if those who support the 'fourth figure' are right) until the predicate, the *dharmin*, has been added to the as yet unparticularised logical subject, the *dharma*, in such propositions. Before its *adhikaraṇa* is assigned it is neither this nor that nor all *particular* fires, but fire in general, without a local habitation. There is then no self-contradiction.

48 a. "And others think that smoke is the *probandum*"

Comment. Pārthasārathi Miśra says : *Naiyāyikās tu dhūmam eva dharmīkṛtya tasyaivāgniviśiṣṭasyā 'numeyatām āhuḥ*. "The *Naiyāyikas* make ' smoke ' itself into the property-possessor or subject, and say that it is smoke-as-qualified-by-fire that is the thing to be proved". This is the position which Uddyotakara maintains in the passage translated above.

48 b. "The objection that the middle term proves the quality (P, fire) in just the sense in which a word, in addition to its function of denoting an individual, has the function of connoting its class-character, is mistaken: for there is no ques-
49 a. tion of the middle term's having a double function similar to the
49 b. double function of the word The *viśeṣaṇa*, P (fire) is not the *probandum* (and therefore the middle term cannot have the function of indicating this, since its business must be to indicate the *probandum*). and the subject or *viśesya*, S (the hill) is already known (and therefore cannot be the *probandum*,—so that the middle term cannot have the function of indicating 'S' either).

50 a. And, as there is non-apprehension only in respect of qualifiedness, it is this alone that is the thing to be proved (and therefore this alone that M indicates—so that there is not any question of a double function of M).

50 b. It might be objected that if the middle term, M (smoke), is taken to be the subject[1],

[1] *nanu dhūmaviśeṣyatve hetoḥ pakṣaikadeśatā* The *natural* meaning of the sentence would be 'the *hetu* is an aspect, i e a part *in intension* of the

51 a. the middle will be one of the things of which P is to be proved.—But this is not so : for M in its common nature is the *probans*, while a specific case of M is the *probandum*"

—The first objection brought against the supposed[1] *Naiyāyika* attempt to dispense with S in the syllogism is in the form of an analogy from the double connotative-denotative function of words. If the word 'cow' can denote individual cows and connote 'cow-nature', it means that the *prameya*, or object of *śābdabodha* (i. e. of the knowledge which comes through understanding the meaning of words) has a sort of doubleness In the same way the *prameya* of inferential knowledge—the *anumeya* or *probandum*—may be expected to show a certain doubleness · that is to say the *linga* or middle term (which is to inferential knowledge what the word is to verbal knowledge,—namely, its instrument) may have a double function corresponding to the double connotative-denotative function of the word · it may (so to speak) have S as its *probandum* in denotation, and P as its *probandum* in connotation. In other words the M of the inference carries with it reference to an S as well as reference to a P. The *Naiyāyika* reply is that the *probans* has a single function—that of proving that *P qualifies* .... . something. There is nothing to show that this 'something' is a 'subject', S, which can have an independent status apart from M. On the contrary, S is no more than M in its proper context.

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pakṣa'. This would however be a fair description of the *hetu* on any view and so it could hardly be an *objection* against the *Naiyāyika* view and the *answer* in fact asserts that M in general is an aspect of the M-in particular which constitutes the *pakṣa* or *probandum* on the *Naiyāyika* view —The meaning of *hetoḥ pakṣaikadeśatā* must then be 'the *hetu* would form in extension a part of the *pakṣa*' or, as Dr Jhā translates, "the middle term would become part of the minor term". If M is, in extension, part of the Mp's, the M's about which P is *to be proved*, it will not help us to prove P

[1]The criticism appears to be based on a misunderstanding of Uddyotakara's teaching

On this view the syllogism would run :—

1 The individual SM is P,

2 *because* M;

3. as other cases (XM) have been found to be M and P,

4. so is this SMP, M and P.

5. *Therefore* this SM is P.

It will be seen that this cannot be formulated as a normal 'syllogism' · because there is no *separable* minor term or minor premise · and because there is no major premise The second member does not state *pakṣadharmatā* ('S is M'), because there is no need to state it—we are dealing with an M already in the very form of our first member or Proposition · and so there is no (separable) minor term of which M is to be stated. The second member is therefore left with the function of emphasising the *probativeness* of being M (through an ablative-inflection, translated by 'because'): as Vātsyāyana puts it (*NBh* p. 41 l. 2) *sādhanatāvacanaṁ hetuḥ* —And the third member does not embody (as it does in Praśastapāda's formulation) the major premise 'all M is P', but is in *fact* what it is in *name*,—an illustration or exemplification of the *probans-probandum* relation.—The fourth member 'applies' the illustration, in the form of what Uddyotakara calls the *liṅgaparāmarśa* · the realisation that in SM M is connected with P. If we insist on putting these arguments into syllogistic form, it will be found that the positive form fails to 'distribute the middle', while the negative form involves an 'illicit process of the major'. But to attempt to reduce them to the 'forms of syllogism' is to misunderstand Uddyotakara's teaching.—Praśastapāda's and Kumārila's arguments can be treated as if they were Aristotelian syllogisms : but not Vātsyāyana's and Uddayotakara's. And this part at any rate of the *Nyāyavārtika* amounts to a protest against the principles upon which 'syllogistic' is based.

CHAPTER V

MEANS OF KNOWLEDGE OTHER THAN PERCEPTION AND INFERENCE

Means of knowledge other than perception and inference —(i) Words.—(ii) Gestures.—(iii) "Analogy".—(iv) Presumption or Implication —(v) "Inclusion."—(vi) Absence or non apprehension —(vii) Tradition.

INTRODUCTORY

The various independent sources of valid cognition recognised by the different schools are stated by Varada Rāja in the *Tārkikarakṣā*[1]. The *Cārvākās* recognised perception alone : the *Bauddhas* and *Vaiśeṣikas* recognise perception and inference : the *Sāṁkhyas* recognise Verbal Testimony besides perception and inference, and one school of *Nyāya* agrees with them in recognising only these three · other schools of *Nyāya* add Comparison as a fourth source of knowledge · Prabhākara, the *Pūrva Mīmāṁsā* teacher, recognises these four together with Presumption or Implication as a fifth : the followers of Kumārila Bhatta, the founder of the other *Mīmāṁsaka* school, add non-existence as a sixth to these : the *Paurānikas* add Inclusion and Tradition.

That this doctrine of the different sources of knowledge (*pramāna*) dates far back in the history of Indian logic is clear from the fact that the *Nyāya-sūtra* (II.ii. 1.ff) devotes a section to refuting the opinion that *tradi-*

[1] *Reprint from the* Pandit (*Benares* 1903) *p.* 56—*Pratyakṣam ekaṁ Cārvākāh, Kanādasaugatau punah Anumānam ca, tac cātha Sāṁkhyāḥ śabdam ca te api, Nyāyaikadeśino 'py evam, upamānam ca kecana. Arthāpattuā sahaitāni catvāry āha Prabhākarah, Abhāvaṣaṣṭhāny etāni Bhāṭṭā Vedāntinas tathā Sambhavaitihyayuktāni tāni Paurānikā jaguḥ.*

The school of *Nyāya* which accepted only three proofs are named in the comment *ad loc.*, '*Bhūṣaṇīya*', which no doubt means followers of the well-known comment *Bhūṣana* on the *Nyāyasāra of Bhāsarvajña* The *Nyāyasāra*, among other unusual features, taught three *pramānas* instead of four. See Vidyābhūsana *HIL* p 358, Keith *ILA* p 30.

-*tion*, *implication*, *inclusion* and *absence* are separate means of proof, and that therefore there are more 'proofs' than the set of four (*pramāṇacatuṣṭva*) which it has itself recognised in the first book. *Implication* is again referred to in the fifth book of the *Sūtra*, which discusses a sophism of "apparent implication" (*arthāpattisama*). Unless therefore we are prepared to maintain that the second and fifth books are later additions to the *śāstra*, we must recognise that the *Nyāyasūtra* presupposes the existence, not only of the *Vaiśeṣika*, but also of other bodies of philosophical doctrine in which logical topics had been discussed.

Praśastapāda deals briefly with the other six supposed means of knowledge (over and above the two which he himself accepts—perception and inference), adding to the list a seventh, *gesture*. It will be convenient to translate his remarks under each of these seven heads as a text for further observations. Two points will be found to emerge in the present chapter. The first is that the Indian notion of *pramāṇa* as source or instrument of valid apprehension is somewhat indefinite and covers more than is signified by the English word 'proof', as is clear from the heterogeneous character of the processes which have laid claim to the status of *pramāṇa* And even the *Vaiśeṣika* school, which rejects the claim in all cases except those of perception and inference, does not achieve a specifically *logical* conception of *pramāṇa*. The second point is that certain of the processes which claim to be separate from *anumāna*, are in fact distinct from *anumāna*, i.e. from syllogistic or paradeigmatic inference, but are nevertheless *inferential* processes: so that, while the *Vaiśeṣika* is mistaken in attempting to reduce them to the specific sort of inference called by the name of *anumāna*, his opponents are no less mistaken in failing to realise that they are still kinds of inference although distinct from *anumāna*.

(*i*) *Word, or Testimony* (*Śabda*)

PBh p 213 l.12. "Words and the rest are also included in inference, because they have the same principle (*samānavidhitvāt*)[1]. As inference comes about in the case of an object not present to sense, on the part of a person who has apprehended the inseparable connection (between 'M' and 'P'), through remembrance of this connection and through unquestionable experience of the Mark, so also it arises in the same way from words, etc And authoritative statement also in the form of *veda* and other scriptures (*śrutismṛtilakṣaṇo 'py āmnāyaḥ*) depends on the credibility (*prāmāṇya*) of the author; as is said in *Vaiśesika-sūtra* I i.3 '*tadvacanād āmnāyaprāmānyam*' 'scripture is authoritative because it is the word of God' And that scripture is not eternal, but has an Author, can be inferred from reasons which are stated in *Vaiśesika-sūtra* VI.i 1 '*buddhipurvā vākyākṛtir vede*' "sentence-structure in the *Veda* presupposes an intelligence"; and again in VI.i.3 '*buddhipūrvo dadātiḥ*' "words such as '*gives*' presuppose an intelligence".

The argument in the second half of this passage is directed against the *Mīmāmsaka* view that the *Veda* has no author, being eternal. The answer is that when in ordinary life we find *sentences* and *words* we infer that the words and their arrangement in sentences have their origin in some intelligent being who uses the words and sentences. Scripture is composed of just such words and sentences, and therefore must have an author And the validity of its statements and injunctions will be *inferred* from the credibility of that author.

[1]Cf the use of *vidhi* above *PBh* p 205 Śrīdhara glosses *samānavidhitvāt* here by *samānapravṛttiprakāratvāt* "because the form or character of the process is the same"; and he explains this by saying "*yathā vyāptigrahaṇabalenānumānam pravartate, tathā śabdādayo 'pi*"—"just as inference functions through the force of the apprehension of inseparable connection, so also do testimony, etc."

The first half of the passage deals with the general problem of the nature of the knowledge derived from words. We should distinguish two questions here; but they are not always kept separate in Indian discussions on the subject—(1) what is the process by which we understand *the meaning* of words? and (2) how do we know that these meanings, when understood, *correspond to realities?* It is the latter question that is intended to be answered by the *Vaiśeṣika* when he says that knowledge derived from words is inferential. Śrīdhara's formulation of the proof that knowledge derived from words is inferential is: *śabdo 'numānam vyāptibalenārthapratipādakatvād, dhūmavat*—"word is an instrument of inferential knowledge, because it gives knowledge of things by force of a universal connection: just as smoke [gives knowledge of fire by force of the universal connection between smoke and fire]"[1]. In the course of Śrīdhara's discussion it soon becomes apparent that the relation between word and thing (the relation of denoting and denoted) is something quite different from the relations of conjunction, inherence, etc., on which inferences such as that from smoke to fire are grounded. It also becomes clear that the relation as such is not an inseparable one, because different words mean the same thing in different languages, and even in the language of the *Āryas* the same word in different districts means different things. Besides, statements are not always true. It is therefore impossible to maintain that there is a natural relation (*svābhāvika-sambandha*) between word and thing: the relation depends on convention (*saṁketa*). And further the *truth* of a statement depends on the speaker, who may

[1]Śrīdhara has a long polemical passage on this, *NK* pp 214—217. It is translated by Faddegon pp. 465—469. See also *NK* 217—220, translated by Faddegon pp. 470—474.

Kumārila (*Śl. Vārt.*, *Śabda*, 15—37) gives the *Sāṁkhya* arguments against the *Bauddha* and *Vaiśeṣika* view, and admits that these arguments are invalid, though he subsequently rejects the view that Verbal knowledge is inference, from the standpoint of his own theory.

or may not be reliable (*āpta*). Thus when we say that the word is an inferential mark which gives knowledge of things through the force of a *vyāpti* or universal connection, we must be understood to mean (*a*) that the connection *depends on human convention*, and (*b*) that word is an inferential mark from which the thing can be known only when it is *spoken by a reliable person*. But after all even such an inferential mark as smoke (used in inferring that the hill is on fire) is a valid mark only with certain qualifications, e.g. if the smoke is rising upwards in an unbroken connection with the ground, etc. The adding of qualifications to the 'Mark' does not prevent the case from being a case of inference.

With this view may be compared Diṅnāga's teaching in the *Pramāṇasamuccaya*, as reported by Vidyābhūṣaṇa[1]. "Diṅnāga asks: 'What is the significance of Credible Word? Does it mean that the person who spoke the word is credible, or that the fact he averred is credible?' 'If the person', continues he, 'is credible, it is a mere inference'. On the other hand if the fact is credible, it is a mere Perception."[2]. The nature of the inference, on the former alternative, is made plain in the citation from Diṅnāga given by Vācaspati[3].

āptavākyāvisamvādasāmānyād anumānatā,—

"We *infer* that the reliable person's words agree with reality, from that common property of agreement with reality which belongs to all statements by reliable persons." That is, we have learned from experience the general rule that trustworthy persons' statements are true, and we apply this rule to the case of this particular statement. The process is therefore inference.

[1]*HIL* p. 288

[2]Vidyābhūṣana's words here are in fact a translation of the objection which Uddyotakara raises *NV* p. 63 ll. 13—16, and which Vācaspati attributes to Diṅnāga, *NVT* p. 188 l. 6

[3]*NVT* p. 138 l. 20.

As to the second horn of Diṅnāga's dilemma,—in the alternative we may learn *by actual experience* that the speaker's statement is *avisamvādin*, i.e. in agreement with reality. And in this case the *pramāṇa*, or means by which the idea conveyed by the words is justified, is perception.

Uddyotakara replies that Diṅnāga's criticism is irrelevant, because he has not understood the meaning of *Nyāya Sūtra* I.i.7—*āptopadeśaḥ śabdaḥ:* which, according to Uddyotakara, means *śabdollekhena pratipattiḥ*, cognition by verbal indication Uddyotakara's attitude apparently is that words *do* lead to belief—and if they are the words of a reliable person, to *right* belief. Therefore they *are* (in the latter case) *pramākaraṇa*—the *instrument* of true cognition and *pramākaraṇa* is *pramāṇa*. Diṅnāga however looks for *another pramāṇa which will provide a justification* or proof of the belief produced by the words. This *justification* Diṅnāga finds either in inference or perception. His refusal to admit that *śabda* is a *pramāṇa* should be due to his understanding the word *pramāṇa* in a different sense from that in which the *Naiyāyika* understands it. And yet the *Bauddha*, as well as the *Naiyāyika*, holds the doctrine of *parataḥ prāmāṇyam*[1], i.e. that no *pramāṇa* carries its own justification with it: its *validity* being established from some other source. The *Naiyāyika* however used this doctrine principally against the *Mīmāmsaka* tenet that the validity of Testimony was self-proved[2]. In view of the fact that the *Bauddha* held the doctrine of *parataḥ prāmāṇya*, it is difficult to understand his refusal to admit that, since *śabda* does, as *a matter of fact*, sometimes give rise to beliefs which *happen* to be true, it is a *pramāṇa*.

[1]*SDS*, chapter on *Jaiminīya-darśana* (p 196 in Cowell and Gough's translation). See Jhā, *Sadho Lal lectures on Nyāya*, page 37.

[2]Jhā, *Sadho Lal lectures*, pp. 37-38.

For, after all, he does use *pramāṇa* in the sense in which the *Naiyāyika* uses it. And, in that sense, *śabda is* a separate *pramāṇa*.

The discussion about *śabda* is perplexing because we feel that the disputants are so often at cross purposes. And the reason why they are at cross purposes is that the distinction between a psychological *cause* of knowledge (*pramā-karaṇa*) and a logical *ground* of knowledge (*pramāṇa* in the sense of *proof*) was not clearly drawn. *Śabda* is clearly a psychological *cause* of knowledge. But, equally clearly it is not a logical *ground* of knowledge; except for those who, like the *Mīmāṁsakas*, were prepared to maintain its '*svataḥ prāmāṇya*' or *logical* self-sufficiency. The *Naiyāyika* was not prepared to do this. But he called *śabda* a *pramāṇa* in the *psychological* sense. The *Bauddha* refused to call it a *pramāṇa* because (quite inconsistently) he was, for the moment, understanding *pramāṇa* in the *logical* sense of self-sufficient ground of belief: a sense really inconsistent with his doctrine of *urataḥ prāmāṇya*.

(ii) *Gesture*

PBh p.220. l.9 "Since we find that cognition is produced by the gesture of a person whose expressive actions are known to us, this too is nothing but inference."

That is, it is not the gesture as such that produces the knowledge, but our knowledge of what the person means by his gestures. The knowledge conveyed by the gesture therefore depends on the connection between the gesture and the speaker's intention. This is a *vyāpti*, and the cognition is therefore inference as being *vyāptibalena*.

Here again we feel that distinctions require to be drawn. (1) Gestures are psychologically a cause of cognition: whether the process by which the cognition is

produced from the gesture is or is not an inferential process is a question for the psychologist.

(2) The cognition which is thus produced is frequently a *de facto* correct cognition. Gesture could in that sense be called *pramākaraṇa*, and therefore *pramāṇa*.

(3) But if we ask the strictly *logical* question,—whether the gesture brings with it any *justification* for believing the *de facto* right cognition to be *de jure* right,—then we shall perhaps have to reply that this justification would depend on an inference of credibility.

It is not clear whether Praśastapāda is answering the psychological question (1) above, or the *logical* question (3) above, when he says that gesture, as a supposed *pramāṇa*, is really inference. And the reason why it is not clear is because he is thinking of *pramāṇa* in the ambiguous sense noted under (2) above,—i e. as *pramākaraṇa*: which may mean either a *de facto* cause of correctness, or a *de jure* ground of correctness in the cognition.

(iii) *Comparison or Analogy* (*upamāna*)

The classical account of this process is as follows. A townsman is told by a forester that a bison (*gavaya*, *bos gavaeus*) is like a cow—'*yathā gauḥ, tathā gavayaḥ*'. He goes into a forest, sees a creature resembling a cow, and realises that this is the creature called a 'bison'. The *outcome* of the process (*upamānaphala*, *upamiti*) is the cognition of the name as applying to the thing. The *instrument* of this cognition (*upamāna*) according to Vātsyāyana is the knowledge expressed in the formula '*yathā gauḥ, tathā gavayaḥ*'[1], 'a bison is like a cow' · but

[1]This suggests the formula of the fourth member of the syllogism the *upanaya* or Application And it is noteworthy that Vātsyāyana, in the passage on *NS* I i. 39 in which he characterises the members (*avayava*) of

according to later opinion it is the *perceived* resemblance of the creature now present to a cow, *assisted by* the memory of the information previously received that a bison is like a cow[1].

But is this really what the *sūtrakāra* means by his definition of *upamāna*,—'*prasiddhasādharmyāt sādhyasādhanam upamānam*'[2].

The *primâ facie* meaning of this is "comparison is the establishing of what is to be established from a known resemblance[3] (*or*: from resemblance to a thing known)". Now this is a description which would be appropriate to the inferential process known to western logic as Analogy. But the difficulty about interpreting the *sūtra* in this way is obvious. Inference, *anumāna*, as set out in the account of the five-membered syllogism, is also a process of 'proving the *probandum* from likeness to a known thing[4]—i e it is described as an analogical process There would thus be no distinction available between *anumāna* and *upamāna*.

And there is no corroborative evidence at all for the existence anywhere in Indian logic of the western notion of analogy, as a specific type of inference distinct from *anumāna*,—

x is like y.

But y has the property P.

Therefore x has the property P.

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the syllogism, says explicitly that the application is analogy—*upamānam upanayah*, *tathety upasamharāt* the application is analogy because it applies (what has been said before in the example) by the use of the word '*tathā*' 'so'. Cf *NS* II i. 48.

[1] Jha, translation, I. 196-197, footnote.

[2] *NS* I. i 6 See also *NS* II. i 44—48 (the rather obscure passage in which *upamāna* is examined) translated pp 318-319 *infra*.

[3] See *infra* p 318 for the meaning of *prasiddha-sādharmya*

[4] Thus in *NS* I i 34 we get what seems practically an identical formula given as the definition of the 'Reason' or *hetu* in a syllogism.—*udāharanasādharmyat sādhyasādhanam hetuh*,—"the Reason is the proving of what is to be proved from likeness to an example".

The passage in the *Nyāyasūtra* in which *upamāna* is examined (II.i.44—48), whatever its exact interpretation may be, certainly has no reference to analogy in this western sense of the term. And the only other ancient authority for the meaning of *upamāna*,—namely, the '*Vṛttikāra*' cited in Śabara's *Bhāṣya* on *Mīmāṁsā Sūtra* I.i.5[1], gives an account still further from our conception of analogical proof. The *Vṛttikāra's* definition runs: *upamānam apy asaṁnikṛṣṭe 'rthe buddhim utpādayati, yathā gavayadarśanaṁ gosmaraṇasya*—" comparison also (i.e. like inference) gives rise to a cognition in an object not in contact with sense : for instance, the sight of the bison gives rise to remembrance of the cow ". This is explained to mean that *upamāna* makes us apprehend the similarity of the object which is present (the bison) to an object which is not present (the cow) but is called up by memory.

For Vātsyāyana, *upamāna*, as *instrument* of cognition, meant a knowledge of resemblance, in the form 'a bison is like a cow' The question is, as Vātsyāyana puts it, *kiṁ punar atropamānena kriyate?*—" what is it that is *effected* by this knowledge of resemblance as an instrument"? In other words what is the *upamiti* or *upamānaphala*, the special kind of right cognition (*pramā*) produced by this special *pramāṇa*, i.e. a cognition of resemblance?

The only answer that Vātsyāyana could find to this question was that the cognition of resemblance led to apprehension of the relation between designation and thing designated (*saṁjñāsaṁjñisambandha*). This seems a rather trivial result for a separate *pramāṇa* to produce · and that is why the Indian account of *upamiti*, cognition arising from resemblance, strikes a Western reader as a singularly barren notion. But Vātsyāyana's examples show that the knowledge of the *name* carried a good deal

[1]Bibl. Ind. edn p 10 l. 16.

more with it. Knowing that the herb called the 'bean-leaf' is like a bean, a person finds a herb like a bean, realises that this is the thing to which the name bean-leaf applies, *and plucks it for medicinal purposes* (*bhaiṣajyāyāharati*). The *recognition* of the object as possessing certain properties is the important thing—not a mere knowledge of names. So understood, *upamiti is* a resultant of importance; and the kind of indirect identification of hitherto unseen objects designated as *upamāna* does play no small part in the growth of knowledge. Thus explained *upamāna* may be described as a process of 'apperception'

For reasons which have already been partly indicated and which are further explained below in the comment on *Nyāya Sūtra* II.i.44—48 (*upamānaparīkṣā*) I think Vātsyāyana's interpretation of *upamāna* gives what was substantially the meaning of the *sūtrakāra*. The wording of the definition of *upamāna* in I i.6 is misleading, more especially in view of its close resemblance to the wording of the definition of the 'reason' (*hetu*, second member of the syllogism) in I.i.34: for when we are told that "*upamāna* is the establishing of what is to be established from likeness to something known", and then told that "the reason is the establishing of what is to be established from likeness to the example", we naturally think that the two processes must be closely allied. But the fact is that *sādhyasādhana*, 'establishing what is to be established', is a phrase which allows of different interpretations: and its meaning is determined by the context. In speaking of the *hetu* it can fairly be translated '*proving* the *probandum*'. But in speaking of *upamāna* it has a different sense—a sense correctly given in Vātsyāyana's paraphrase *prajñāpanīyasya prajñāpanam*. So that *sūtra* I.i.6 means that "*upamāna* is the making known of what has to be made known, from likeness to a known thing".

Praśastapāda says :—

PBh p 220 l 16 "Knowledge of likeness as an instrument of valid cognition is nothing but credible testimony (*upamānam āptavacanam eva*), because it is the conveying of the (idea of the) bison, through the (idea of the) cow, to a person to whom the bison is unknown[1], by a person who has seen a[2] bison ".

Praśastapāda has already reduced Testimony to Inference: so that in reducing *upamāna* to Testimony he is, from his own standpoint, reducing it to Inference. The view which he is criticising is perhaps Vātsyāyana's for it is Vātsyāyana who identifies the instrument of *upamiti* with the knowledge '*yathā gauḥ, tathā gavayaḥ*'; ignoring the *perception* of the *gavaya* which later commentators make an integral part of the *upamāna* as the instrument of *upamiti* And, as against this (clearly inadequate) view, Praśastapāda uses an *argumentum ad hominem*: " You identify *upamāna* with knowledge in the form 'the bison is like the cow'. But this knowledge can only have been derived from testimony. So that *upamāna* is, from your own standpoint, *āptavacana*, and not a separate instrument of cognition ".

This may be effective as against Vātsyāyana, but is incomplete as a criticism in face of a more adequate analysis of the intellectual process which Vātsyāyana has in view. That process certainly depends partly on testimony: but it is something *more* than a belief based on testimony—and it is in virtue of this something more

[1]The text has *aprasiddhasya gavayasya*, but there is a variant *aprasiddhāvayavasya* It is necessary to emend to *aprasiddhagavayasya* and that this is the right reading is confirmed by the commentary which in line 21 has *aprasiddhagavayasya*, and glosses it by *ajñātagavayasya*. See Faddegon p. 475 note

[2]*āptena*=by a fit, i e credible person But later commentators always explain it in this connection, as 'one who has had *āpti*, i e *sakṣād arthasya prāptiḥ*.

that the name *upamāna* is used of it. Śrīdhara accordingly supplements Praśastapāda's brief criticism[1].

Dinnāga in the *Pramāṇasamuccaya* argued that *upamāna* is not different from either (on one interpretation of it) perception, or (on another interpretation of it) testimony[2],—*na pratyakṣād vākyād vā vyatiricyate*[3] " When one apprehends both the cow and the bison by perception, then one gets the knowledge that 'this is like that' from *perception*. When again one hears that 'the bison is like the cow', then it is merely on *hearing* this that one understands that some of the qualities of the cow are present in the bison and some are absent—since otherwise the phrase 'like' (*yathā. . tathā*) would not have been used. It is a preponderant sameness of qualities (*bhūyas sārūpyam*) that one apprehends ".

Both Uddyotakara and Vācaspati reply that Diṅnāga's criticism is irrelevant because he has not understood what the *sūtra* means by *upamāna*—i.e he has not taken Vātsyāyana's view of the *sūtra* as meaning by *upamāna* the process of applying a name to a thing through similarity to a known thing; but has interpreted it as merely the process of getting to know the similarity of two things[4]. And this seems a fair criticism of Diṅnāga.

[1]*NK* pp 220—222 In criticising the view of the "disciples of Śabara Svāmin", i e the view above referred to in connection with the definition of *upamāna* given by Śabara, he quotes Kūmarila, *Slokavārtika*. *upamāna*, 35 Faddegon translates this passage of *NK* at pp 475—478 For the *Mīmāṁsaka* account of *upamāna*, see Jhā's *Prābhākara School of Pūrva Mīmāmsā* pp 68-69—referred to by Faddegon *loc cit*

[2]*NV* p 60. l 16 ff, with *NVT* p 135 ll 3—19. For Diṅnāga testimony is of course not a separate *pramāṇa* What he says amounts to this, that *upamāna* is reducible either to perception or inference

[3]*NVT* p. 135 l. 14 It is part of a *śloka* from Diṅnāga

[4]*NV* p 61 l. 8 *aparijñāya sūtrārtham* *NVT* p 135 l 3 *tad īdṛśam upamānaphalam* (*videlicet, saṁjñāsaṁjñisambandha*) *avidvān sādṛśyajñānam sādṛśyaviśiṣṭajñānam vopamānam iti bhrānto Bhadanto Dinnāga ākṣipati* (*sādṛśyajñāna* is the knowledge derived from testimony, *sadṛśyaviśiṣṭajñāna* is the knowledge derived from perception —the former=*yathā gauh tathā gavaya iti*, the latter=*gosādṛśyaviśiṣṭo 'yam īdṛśaḥ piṇḍaḥ*. See *NVT* p 139 ll. 5-6)

Vācaspati argues that, understood as Vātsyāyana understands it, *upamāna* must be regarded as a *pramāṇa* distinct from perception, etc., on the ground that it produces a kind of right cognition (*pramā*) distinct from those produced by the other *pramāṇa's*—*pratyakṣādibhyaḥ pramāṇāntaram upamānam tajjanyapramāvilakṣaṇapramājanakatvāt*.

Note on the examination of the notion of upamāna in Nyāya Sūtra II. i. 44—48

Sūtras 44-45. A dialectical objection is raised. Similarity must either be complete, preponderant, or slight. If complete, there is not *resemblance*—no one says 'a cow is *like* a cow'. Nor again is resemblance asserted on the basis of preponderant similarity—no one says 'an ox is like a buffalo'. Nor again on the ground of slight similarity—otherwise everything would be like everything.

This is set aside on the ground that analogy proceeds from a *prasiddhasādharmya*. There is no question of all, most, or little—there *is* resemblance : and where there is resemblance analogy cannot be denied.

Sūtras 44-47. *Pratyakṣeṇāpratyakṣasiddheḥ* (46) *Nāpratyakṣe gavaye pramāṇārtham upamānasya paśyā ma iti* (47).

According to the commentators, *sūtra* 46 argues that *upamāna* is really *anumāna*, inference, because (like inference) it proves by means of something perceived something which is not perceived. *Sūtra* 47 replies that *upamāna* does not prove something unperceived,—" we do not see *upamāna* functioning as a *pramāṇa* in the case of the bison as something unperceived ". We apprehend by *upamāna* that a bison *present to sense* is a bison. Whereas we *infer* the existence of fire *which is not*

present to sense. Thereby *upamāna* is different from *anumāna.*

The passage seems to show that Vātsyāyana's account of *upamāna* is that intended by the *Sūtrakāra*, and stands for the genuine tradition of the ancient school of *Nyāya.*

Sūtra 48. *Tathety upasaṁhārād upamānasiddher nāviśeṣaḥ*

"The process of *upamāna* is established by the use of 'so' or 'like' (in the 'application' or fourth member of the syllogism). and therefore it is not true that it is not different from *anumāna.*"

The present *sūtra* suggests that the motive for the recognition of *upamāna* as an independent source of knowledge was to provide a *pramāṇa* corresponding to the fourth 'member' in the way in which 'testimony' corresponds to the first, 'inference' to the second and 'perception' to the third. *Cf NBh.* p 44, ll. 11—15, on *NS.* I.i 39.

(*iv*) *Presumption or Implication* (*arthāpatti*)

According to the classical account of this process it consists in finding a supposition which reconciles a *primâ facie* contradiction. The two stock examples are. (1) You have information that Caitra is alive: but you do not find him in his house. *Ergo*, he is out. (2) You are told of one Devadatta who is fat and does not eat by day. You draw out of this statement the implication that he eats by night. The former is given as an illustration of *dṛṣṭārthāpatti*, implication or presumption from experienced facts; the latter as an illustration of *śrutārthāpatti*, implication or presumption from words[1].

[1] *NK* p. 222 l 9 ff. and ll. 25—27. The passages in the *NK* in which *arthāpatti* is discussed extend up to p 225, and are translated by Faddegon pp 478—483.

Arthāpatti was recognized as a separate means of valid cognition (*pramāṇa*) by both schools of *Pūrva Mīmāṁsā* (*Bhāṭṭas* and *Prābhākaras*)[1], and the doctrine is found with its essential features developed as early as the *Vṛttikāra* cited by Śabara[2]. The passage in Śabara's *Bhāṣya* may be quoted as the *locus classicus*.

Śabara

"*arthāpattir api dṛṣṭaḥ śruto 'rtho 'nyathā nopapadyata ity arthakalpanā · yathā, jīvato Devadattasya gṛhābhāvadarśanena bahirbhāvasyādṛṣṭasya kalpanā*"
"Presumption is the supposition of a thing on the ground that a thing, heard or seen, is otherwise not possible · for instance, through finding that Devadatta, though alive, is not at home (there arises) the supposition of his being out—a thing which we do not know by actual experience."

Nyāya-sūtra and Vātsyāyana

This however was not the only account of 'presumption' current in the early schools; and it was not the original meaning of the term. The notion is discussed in that passage of the *Nyāya-sūtra*[3] which argues

[1] Jhā, *PSPM* pp 70-71 See also *Ślokavārtika*, section '*arthā patti*'.

[2] Bibl Ind edn. p 10 ll 17—20

[3] The section known as *pramāṇacatuṣṭvavyavasthāpanā*, *NS* II ii 1—12 *Arthāpatti* is spoken of in *sūtras* 1—6

It is worth noting that *arthāpatti* is one of the 32 *tantrayukti's* or methodological notions used in a *śāstra* of which Suśruta, Caraka and Kauṭilya give lists with definitions and examples The definition of *arthāpatti* given by Kauṭilya (with which Suśruta's definition agrees) is "*yad anuktam arthād āpadyate*": and the example from the *śāstra* is that, when we are told that a person skilled in the ways of the world should approach a king by way of good advice which pleases, the implication (*arthād āpannam bhavati*) is that he should not give good advice that does *not* please. This corresponds to Vātsyāyana's account, not to Śabara's

Kauṭ Arth. S adhikaraṇa 15, *adhyāya* 1—p 424 of Mysore edn. 1909.

against the separate status of supposed *pramāṇa's* other than the four enumerated in *NS* I.i. 3; and the account there given, as interpreted by Vātsyāyana, is not identical with the account given by Śabara.

Vātsyāyana begins by defining *arthāpatti* as *abhidhīyamāne 'rthe yo 'nyo 'rthaḥ prasajyate*—"another thing which follows as an implication of the thing that is stated[1]". The example which he gives is · *yathā megheṣv asatsu vṛṣṭir na bhavatīti kim atra prasajyate? satsu bhavatīti*—" for instance, what is implied in the statement that when there are no clouds it does not rain? (The implication is) that it rains where there are clouds[2]", i e. the object cognised through implication is that the production of the effect, rain, is limited to the existence of the cause, clouds—"*kāryotpādaḥ kāraṇasattām na vyabhicarati*". If not A, not B : *ergo*, if B, then A. Vātsyāyana further characterises this process as 'apprehending from opposition what is not stated' —*anabhihitasyārthasya pratyanīkabhāvād grahaṇam*' (*NBh* p. 101 l 6 on *NS* II.ii.2) He says shortly afterwards · " from the statement that in the absence of the cause the effect is not produced, we arrive by implication at what is related to this as its opposite, namely, that the effect is produced in the presence of the cause[3]. For from a negative comes the opposed affirmative".

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[1]*NBh* on *NS* II ii 1, p 100 l 11 This looks like a paraphrase of the *tantrayukti* cited in the preceding footnote That Vātsyāyana was familiar with these lists of *tantrayukti's* is clear from *NBh* p. 16 l 9 on *NS* I. i 4 As the *śloka* quoted by him in *NBh* p 7, l 5 on *NS* I i. 1 occurs in the *Kauṭilīya Artha śāstra* it is even possible that he knew the list as *Kauṭilya* gives it Cf also *NS* V i 21 (*arthāpattisama*).

[2]An opponent objects that it does *not* always rain when there are clouds, so that the conclusion arrived at by implication is uncertain (*anaikāntika*) —The answer given is that he misunderstands the result given by 'implication',—the implication of 'when there are no clouds it does not rain' is 'when it does rain there *are* clouds'

[3]*NBh* p 101 l 16 on *NS* II. ii 4: *asati kāraṇe kāryam notpadyata iti vākyāt pratyanīkabhūto 'rthaḥ sati kāraṇe kāryam utpadyata ity arthād āpadyate Abhāvasya hi vākyād bhāvaḥ pratyanīka iti*

It will be clear that Vātsyāyana means little more by *arthāpatti* than what Western formalists call the opposition of propositions and immediate inference. But Vātsyāyana has no doctrine of 'logical opposition' such as that embodied in our 'Square of Opposition'. He notes that some supposed 'implications' are in fact not logically necessary (*anaikāntika*); but he does not formulate the precise conditions under which an implication is cogent [1]

Nevertheless the *sūtra* already defends *arthāpatti* against the charge of being inconclusive (*anaikāntika*); although it denies that it is an *independent* source of knowledge, and holds that it comes under the head of inference. Neither the *sūtra* nor the *Bhāṣya* makes it clear just what form implication would take when expressed as *anumāna*, inference through a middle term. But the *sūtra* has no doubts as to the identity of *arthāpatti* and *anumāna:* for it argues against the objector's inference ("implication is not a source of valid knowledge because it is inconclusive"), that, if implication is invalid, then this inference is itself invalid; while, if the inference is valid, then implication is valid: the meaning of the dilemma being that the validity of inference stands or falls with the validity of implication—since in fact there is no distinction between implication and inference. Neither the *sūtra* nor the *Bhāṣya* recognises the distinction, first made perhaps by some *Mīmāṁsaka* predecessor of Śabara (unless Śabara himself originated the doctrine), between verbal implication (*śrutārthāpatti*) and real implication (*dṛṣṭārthāpatti*). Praśastapāda recognises it, but regards it as of little importance.

All implication is within a system, and therefore relational. Vātsyāyana takes his example from the

[1] Indian Logic never developed the sort of doctrines which we class as 'formal', and its omission to concern itself with the 'opposition of propositions', in our sense, is a case in point

causal relation, Śabara takes his from spatial relations (if a man is not here, he is elsewhere), while the later *Mīmāṁsaka* adds one based on time—if not now, at another time. All three illustrations *can* easily present themselves as a mere opposition between positive and negative—between this and not-this; for the reason that a system is a whole of mutually exclusive parts, and can always be expressed disjunctively. This aspect of the relational argument is present to Vātsyāyana when he characterises the argument as based on *pratyanīkabhāva*, or opposition: and when he says the positive is the *pratyanīka* of the negative he lapses into a 'formal' view of 'implication'. Śabara and his school, partly at least, avoid this tendency to a formal account, because they think of the system of facts as forcing upon the mind a point of view which is not merely the *negative* of the impossible supposition but a *positive* conception in itself. Nevertheless they do not succeed in realizing the constructive or 'synthetic' character which is the mark of a genuine *arthāpatti*—as exemplified for example in geometrical construction, in which new positive truth *arthād āpadyate*—arises by implication in the concrete character of a system[1].

Praśastapāda

Praśastapāda does not seem to accept Vātsyāyana s account of *arthāpatti*; and he draws the distinction, which Vātsyāyana does not draw, between *dṛṣṭārthāpatti* and *śrutārthapātti*. His actual words, however, do not enable

[1]Faddegon suggests, what seems very probable, that *arthāpatti* originally "was a notion due to the exigencies of exegesis Where a literal explanation of the text was not possible, one had to go back (*āpadyate*) to the meaning or intention of the speaker (*artha*) *Arthāpatti* thus signified 'reading between the lines' Later on, *arthāpatti* got a wider meaning, only the *śrutārthāpatti* was a remnant of the old use of the term". *Vaiśeṣika System* p. 478 footnote.

us to determine what view of *arthāpatti* he has in mind. But, for reasons suggested below, it is probable that Śrīdhara interprets him correctly.

PBh p.223 l.1. "Implication from an object of experience is no more than inference by opposition (*virodhy eva sc. anumānam*): implication from what is heard is inference from the inferred."

Comment. (*a*) *dṛṣṭārthāpatti*

Śrīdhara glosses *virodhy anumānam* by: "*pramāṇāntaraviruddha evārtho 'rthāntarāvinābhūta iti virodhy eva liṅgam*"—" a thing which when contradicted by some other means of knowledge is inseparably connected with another thing is a 'Mark by contradiction' ". Absence from the house, when contradicted by knowledge that the man is alive, is inseparably connected with, and therefore is the Mark of, being outside the house Śrīdhara takes the reference to be to some such view of *arthāpatti* as Śabara's

It is a case of inference, *anumāna*, because it clearly relies on *avinābhāva*, universal connection. '*yasya yathā niyamas, tasya tathaiva liṅgatvam*', says Śrīdhara: " there is a middle term (i.e. the process is inference or *anumāna*), just so far as there is a rule of necessary connection ". " If absence in the house caused the thought of presence outside *simply* through the impossibility of the former alternative (*anupapattimātreṇa*), it would not be a middle term based on a universal rule (*niyamahetu*) and therefore the absence from the house might lead to the thought of something else too (*arthāntaram api kalpayet*—i.e. it would not point to any *definite* alternative)". The *Mīmāṁsaka* says that knowledge of absence from the house generates the idea of something else in order to make itself possible (*svotpattaye*)—and it is *not* possible on any other hypothesis except that of the man's being outside (*anyasmin kalpite na tasyopapattiḥ*).

But on what authority (*kena*) does he affirm that a living man's absence from the house is only possible *in case he is outside?* On the authority of the experience that a finite substance if it is in one place is not anywhere else. But then the realisation of the possibility of the man's absence from the house has as its condition a positive connection (*anvaya*), and so is inferential, since its arising depends on a universal connection. The form of the argument would be : 'Devadatta is out, because being alive he is not seen in the house : like me'[1].

—There is no question that the process is ' inferential' in the sense of depending on a universal. The question is whether it can be 'reduced to syllogistic form' : and since the Indian syllogism is in essence inference *from examples* this really amounts to asking whether *arthāpatti* can be represented (fairly) as inference *from examples* : and the obvious irrelevance of the example in Śrīdhara's attempt at reduction to syllogistic form indicates that it cannot be done. *Arthāpatti* is not inference from examples —Western logic meets with similar difficulties in attempting to reduce relational arguments to terms of our syllogism · we cannot easily construct a premise stating explicitly the universal from which the conclusion could be supposed to be 'deduced'; and the premises as they stand present a *quaternio terminorum:* as for instance in such arguments as 'A is to the right of B, and B to the right of C, therefore A is to the right of C'. Indian logic in its doctrine of *arthāpatti* is facing this same problem, though from a different angle.

[1]The above is the substance of what Śrīdhara says on *dṛṣṭārthāpatti*, *NK* p. 223 ll. 3—16 One or two sentences remain unintelligible to me—I have omitted them. Faddegon's translation of the passage at pp 479-480 is confused.

The argument (in the last sentence of the above) is in the affirmative (*anvayin*) form. The *Naiyāyika* tradition makes *arthāpatti* a *kevalavyatireki anumāna*, e.g. *Tarkabhāṣā* pp 80-81 the form being "Devadatta eats by night; because he is fat without eating by day; those who do not eat by night are not fat-without-eating-by-day; like so-and-so who eats neither by day nor night and is thin, not so Devadatta, etc."

The Indian syllogism from example does not differ in essentials from the Western syllogism. Both are subsumptive. And the fact is that there are important classes of inference which are *not* subsumptive, and therefore refuse reduction to syllogistic form, or to *anumāna*. Indian logic gives a few illustrations of such arguments under the rubric of *arthāpatti*. The treatment of the topic is inadequate : but it is still a valuable suggestion.

(b) śrutārthāpatti

Praśastapāda's meaning in calling verbal implication *anumitānumāna* is merely that verbal testimony is itself (on his showing) inference The facts derived by ' implication ' from words are arrived at inferentially : therefore the ' implication ' got from such facts is ' inference from the inferred '

(v) Sambhava—Inclusion

PBh p.225 l.10 "Inclusion[1] also is neither more nor less than inference, because it is a case of something which cannot exist without another thing (*avinābhāvitvāt*)".

NK ad. loc. Śrīdhara explains : "A hundred is known to exist through the knowledge that a thousand exists, as the result of a separate source of knowledge called 'inclusion', which takes the form 'A hundred is included in a thousand' Some people hold this view, but the author rejects it on the ground that the knowledge of a hundred from a thousand is just inference because it is conditioned by the knowledge that a hundred is inseparably connected with a thousand".

[1]The translation of *sambhava* by 'probability' in this connection is a mere error The examples given are always cases of quantitative inclusion of part in whole, and place the meaning of the term beyond doubt. Jhā on *NS* II. ii 1 translates 'deduction'; but this is too wide a term. Keith *ILA* p. 57 gives 'equivalence or inclusion' · I have not met the term in the sense of 'equivalence'.

Vātsyāyana[1] gives a similar account, and, like Praśastapāda, uses the term *avinābhāva* in this connection · but this term was not for him, as it had become for Praśastapāda, a technical name for the universal in reasoning. Perhaps it first found its way into the language of logic in some such usage as is illustrated in this passage of the *Nyāyabhāṣya*. "What is called 'inclusion' is the grasping of the existence of another thing as the result of grasping the existence of a thing which is its *avinābhāvin*, i.e. does not exist without it[2]. For instance we apprehend the existence of an *āḍhaka* (a weight which is the quarter of a *droṇa*) from apprehending the existence of a *droṇa*, and of a *prastha* (which is the quarter of an *āḍhaka*) from apprehending the existence of an *āḍhaka*" And again :—

"A quantity and its constituents being united by the relation of inseparable concomitance (*avinābhāvavṛttyā sambaddhayoḥ samudāyasamudāyinoḥ*), the apprehension of the constituent by means of the aggregate (*samudāyena*) is 'inclusion' : and this too (i.e as well as *arthāpatti*) is just inference."

—As in the case of *arthāpatti*, there is a failure to generalise the particular case. The case is that of argument from quantitative relations—the case of arithmetic, if not of mathematical reasoning in general : and the question whether *sambhava* is a separate *pramāṇa*

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[1] *NBh* p 100 ll 12—14 and p 101 ll. 7-8 on *NS* II. ii 1-2 The term *sambhava* occurs in both these *sūtras*. The reference to *arthāpatti*, *sambhava*, etc, in these *sūtras* is a proof that logical doctrines other than those of the *Nyāya* were already in existence

[2] The inclusive quantity is accurately called the *avinābhāvin*, as being that which cannot exist without the included quantity The smaller of course *can* exist without the larger A hundred can exist without a thousand, but a thousand cannot exist without a hundred In 'All M is P', M is the *avinābhāvin*, i.e that which cannot exist without P But P can exist without M.

P on the other hand is the *sine quâ non* of M—a hundred is the *sine quâ non* of a thousand The *sine quâ non* is that without which something cannot exist The *avinābhāvin* is that which cannot exist without another thing this other thing being its *sine quâ non*

is in fact the important question whether arithmetical reasoning is deductive in the sense of being *syllogistic.* Indian logic did not grasp the fundamental character of the problem,—neither did Western logic, until Kant pointed it out. Western formalism is in a more awkward predicament than Indian here in view of its quantitative treatment of the syllogism. Both the Western and the Indian formalist would reduce arithmetical reasoning to syllogistic form. But the Western formalist at the same time reduces the syllogism to a kind of arithmetic[1].

(*vi*) *Abhāva. Non-existence or negation*

It is clear from the discussion in the *Nyāya Sūtra*[2] that the investigation of the nature of non-existence (*abhāva*) arose out of a dialectical difficulty—How can we know that which is *not?* or, How can we assert that anything is *not?* It is, as we should perhaps say, the problem of how a negative judgment is possible Śabara gives no sign of being aware of any difficulty: but the position which he takes up is one out of which the dialectical difficulties stated and met in the *Nyāya Sūtra* would inevitably arise. He simply says[3] *abhāvo 'pi pramāṇābhāvo nāstīty asyārthasyāsamnikṛṣṭasya*--"non-existence being an absence of any instrument of knowledge, is also (as well as *anumāna* and *arthāpatti*) the thought[4] of something not present to sense—viz., of that thing (to which the *pramāṇa would have* applied)[5]—in the form 'it is

[1]See *Note on the Indian Syllogism* pp 411-412 For tendencies to a quantitative formulation in Indian logic see pp 230—232

[2]*NS* II ii 7—12

[3]*Śābarabhāṣya* p. 10 l 20—For later *Mīmāṁsaka* differences of opinion on this topic see Jhā, *PSPM* p. 72, and *Ślokavārtika*, section on *abhāva*

[4]Supplying *kalpanā* from the preceding clause.

[5]This seems to be the force of *asya.*

not' ". The dialectical difficulty of asserting that the *absence* of means of knowledge can lead to *knowledge*—knowledge that the thing is not—is obvious, and is precisely that raised in the *Nyāya Sūtra*. Kumārila interprets Śabara's statement as meaning that non-existence is the absence of any *other* instrument of knowledge; and draws the implication that non-existence is itself a distinct (sixth) instrument of knowledge, as being the source of negative judgments.

*Nyāya Sūtra, II ii.*7—12

The *Nyāya Sūtra* denies that *abhāva* is a *distinct* instrument of cognition, on the ground that it is inferential (II.ii.2): but later (II.ii.7—12) asserts the validity of negative judgment as against dialectical objections. In the latter passage the objector argues that negation is invalid (*na prāmāṇyam*) because there is no *object* of cognition (*prameya*) corresponding—the non-existent not being a '*prameya*'[1].—This objection springs from mere impudence (*vaiyātyāt*), says Vātsyāyana; for common experience provides numerous instances of '*prameya's*' of negation. The following *sūtra* (II.ii.8) gives one such by way of example:—a number of (e.g.) pieces of cloth are marked, and a number are unmarked; someone is told to fetch the unmarked pieces, and is able to do so because the unmarked pieces become objects of cognition just from *not* being marked —The objector returns to the charge with the rejoinder that what simply *is not* cannot even be negated (*asaty arthe nābhāvaḥ*)—if there *are* no marks you cannot say that the cloth is unmarked: to which the answer is given that marks *do* exist,—in the other pieces of cloth (*anyalakṣaṇopapatti*).— The objector retorts that the negation does not refer to the

[1] This objection supplies the motive for the erection of *abhāva* into a separate seventh category by the later *Vaiśeṣika* and *Nyāya* schools, coordinate with the six positive categories of Praśastapāda and the earlier school.

marks *on the marked cloths*—that would involve self-contradiction, since the marks on these cloths *are* present. It is impossible to say that the absence of marks *on the marked cloths* is the means of apprehending *the unmarked cloths*.—The reply is that it is not of course intended to assert the absence of the marks *in* the very things in which the marks are present. But the absence is apprehended *relatively to* the things in which the mark is present (*lakṣaṇāvasthitāpekṣāsiddheḥ*).—The final *sūtra* (II.ii.12) adds a further argument for the validity of the negative judgment, namely, that before a thing comes to be it *is not*[1]. This argument rightly connects negation with becoming : it is impossible to conceive of 'becoming' without the notions of 'not yet' (antecedent non-existence) and 'no longer' (subsequent non-existence) Uddyotakara's summary judgment on the opponent's arguments is that they are mere quibbles (*chala*), which call not for refutation but for rebuke : for a quibble, when witting, is *ignoratio*

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[1]In his comment on this Vātsyāyana clearly enunciates a *twofold* division of *abhāva* into antecedent and subsequent non-existence but he makes no mention of the other varieties recognised by the later school '*Abhāvadvaitaṁ khalu bhavati, prāk cotpatter avidyamānatā, utpannasya cātmano hānād avidyamānatā*".

The fourfold classification appears to be a relatively late doctrine, perhaps dating from Kumārila —

kṣīre dadhyādi yan nāsti prāgabhāvaḥ sa ucyate
nāstitā payaso dadhni pradhvamsābhāva iṣyate
gavi yo 'śvādyabhāvas tu so 'nyonyābhāva ucyate
śiraso 'vayavā nimnā vṛddhikāṭhinya-varjitāh
śaśaśṛngādirūpena so 'tyantābhāva ucyate.

"The non-existence of curds in the milk is antecedent non-existence; the non-existence of milk in curds is subsequent non-existence or non-existence after destruction, the negation of horse in the cow is mutual or reciprocal negation, absence on the slope of the head of hardness and excrescence is absolute non-existence—non-existence of such things as the horns of a hare" (*Ślokavārtika, abhāva*, 2—4)

Still later, the three varieties 'antecedent', 'subsequent' and 'absolute' were classed together under the general head of *samsargābhāva*, the common element in these three being apparently the temporal reference in 'not yet', 'no longer' and 'never' (for *atyantābhāva* is explained as *traikālikābhāva*, non-existence in past, present and future) 'Reciprocal non-existence' is a denial of identity (*tādātmyapratiyogikābhāva*), without any temporal reference. See *TB* pp. 146—148.

elenchi (*arthāntara*)[1]; and, when unwitting, only shows the ignorance of the person who employs it. But this is hardly fair · for what the opponent has urged is a genuine dialectical difficulty.

Nyāya Sūtra II.ii.2, and Vātsyāyana

As regards the earlier passage (II.ii.2) the question arises—On what grounds does the *sūtrakāra* reduce ' non-existence ' to inference? No answer is to be found in the *sūtras* themselves, and we have to rely on Vātsyāyana's comment[2]. But what he says strikes us as irrelevant; for he does not attempt to answer the question which we expect him to answer—the question how we know that a thing *is not*. Instead of dealing with this question, he gives an example to show that, *given* the knowledge that something *is not*, we can then use this knowledge as a means of apprehending that something else *is*. And he has no difficulty in showing that, when *abhāva*, non-existence, is *in this sense* a *pramāṇa*, i.e. a means of apprehending something, it is simply an inferential process. " Absence or non-existence (as a *pramāṇa*) depends on an opposition[3]. That which is not is the means of apprehending that which is (*abhūtaṁ bhūtasya sc. pratipādakam*)—non-existent rainfall causes us to apprehend an existent conjunction of wind and cloud, on the ground that where there is a restraining conjunction of wind and cloud the falling of the rainwater as the result of gravity does not take place." And again : " An opposition being established

[1]Jhā, *Translation*, Vol. II p 316 *NV* p 179 ll. 7—10, and p 282 ll. 16—19 On these technicalities see the next chapter on Sophistical Refutations.

[2]*NBh* p. 100 ll 15—17, and p 101 ll. 8-9.

[3]*abhāvo virodhī* This is comparable with Praśastapāda's account of *arthāpatti* as *virodhy anumānam* I suspect that Praśastapāda has this passage of the *Nyāyabhāṣya* in view, and is deliberately amending Vātsyāyana's teaching. He means to say that what Vātsyāyana calls *abhāva* is in fact *arthāpatti*.

in the form ' where this is, that does not happen ', we *infer* through the non-occurrence of the effect the existence of something which counteracts the cause (*kāraṇasya pratibandhakam*)".

Praśastapāda

Praśastapāda's brief statement shows that he takes *almost* the same view of non-existence, considered as a means of apprehension (*abhāvapramāṇa*), as Vātsyāyana does; but with this difference, that he identifies it with inference from absence of effect to *absence* of cause, whereas Vātsyāyana identifies it with inference from absence of effect to *presence* of a counteracting cause[1].

As a contribution to the real problem of negation, as conceived by the *Mīmāṁsakas* and the later *Naiyāyikas* and *Vaiśeṣikas*,—the problem, How do we know that which is *not?*—Praśastapāda's teaching is thus as irrelevant as Vātsyāyana's. He says :—

PBh p.225 ll.14-15. "Non-existence also is neither more nor less than an instrument of inference (*anumānam eva*). Just as the occurrence of an effect is the inferential Mark in the apprehension of the presence of the cause, so the non-occurrence of the effect is the inferential Mark in the apprehension of the absence of the cause."

Śrīdhara

Śrīdhara ignores Praśastapāda's account, and proceeds to deal with the real problem in a long and valuable polemical digression[2]. He points out that even those

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[1]This difference confirms the suggestion made in the preceding footnote. If the inference through opposition (*virodhy anumānam*), to a counteracting cause, is to be classed as 'presumption' (*arthāpatti*), the inference through non-existence (*abhāva*) has to be differentiated from it. The *differentia* is that the former infers a positive entity, the latter a negation

[2]*NK* pp. 225—230 The first part deals with *abhāva* as a *pramāṇa*, the second part with *abhāva* as a category That is, he deals with two

who assert that *abhāva* is a distinct instrument of cognition have to qualify the assertion by adding that the thing thus cognised as absent must be such a thing as is *capable of being perceived* if present; and that the conditions of perceiving it must be present. But this at once introduces an inferential element into the apprehension of non-existence,—the middle term being the fact that the thing is not perceived (*anupalabdhi* in the Buddhist terminology: but Śrīdhara uses *abhāva* as synonymous with *anupalabdhi*). The ' major premise ' is the universal connection between non-perception of an object capable of being perceived (*yogya*) and its non-existence[1].

But what of this ' fact that the thing is not perceived'? For instance when there is no pot on the floor —the floor is *perceived* as present. Why not say that the jar is *perceived* as absent[2]? That is, why not class negative apprehension as a case of perception, instead of calling it inference?

—Well, perception is defined as apprehension arising from contact of sense and object. and there is an obvious difficulty in conceiving of contact of the senses with an *absent* object. You may reply that whether an object can or cannot be in contact with sense can only be decided by the result: and since we *do* perceive absence we must conclude that there is somehow contact of sense with the

problems: (*a*) How do we know the non-existent? and (*b*) In what sense is non-existence or negation an aspect of reality?

Both parts are translated by Faddegon pp 483—492

[1]Cf the formulation of inferenec through non-perception (*anupalabdhi*) by Dharmakīrti in the *Nyāyabindu* p 110—*yat sad upalabdhilakṣaṇaprāptam tad upalabhyata evety ukte 'nupalabhyamānam tādṛśam asad* See *Note on the Indian Syllogism* in *Mind* XXXIII N S 132 (Oct, 1924), pp 399-400, footnote Śrīdhara (*NK*. p 226 ll 1—3) says "*yogyānupalambho jñeyābhāvaṁ na vyabhicarati, ayogyānupalambhas tu vyabhicarati, saty api jñeye tasya sambhavād* . . *Evaṁ saty abhāvo liṅgam eva syād, avinābhāvagrahaṇasāpekṣatvāt*"

Śrīdhara's *yogya* is Dharmakīrti's *upalabdhilakṣaṇaprāpta*.

[2]This is the later *Naiyāyika* view Hitherto he has been arguing against the *Mīmāṁsakas*.

absent as absent. But the truth is that every negation or absence has a definite *locus* (*adhikaraṇa*) : and that, whereas the sense is in contact with the *locus* and functions in the apprehension of the *locus*, it does not function in the apprehension of the absence : as is shown by those cases where we are subsequently asked 'Was so-and-so there?', and we *then* (i.e. when sense is no longer functioning) apprehend his absence. Nor can this be a case of memory; for we remember what we have previously experienced : but the absence now apprehended was *not* apprehended before. Nor are the difficulties any less for those[1] who, admitting that absence cannot be apprehended by perception, urge that the absence of the object is apprehended by the *absence* of apprehension through any of the five instruments of apprehension (perception, etc.) . which proves (as they hold) that *absence* (*abhāva*), or *non-apprehension*, is a distinct instrument of apprehension (*pramāṇāntara*)[2]. For, in the case above instanced of realising subsequently that so-and-so was not present,—is the 'non-apprehension' which (according to this account) establishes his absence, a *present* non-perception establishing a present absence, or a *past* non-perception establishing a *past* absence? A present non-perception would not be 'non-perception of a thing capable of being perceived' (*yogyānupalabdhi*), for the scene of the absence is now remote; besides the apprehension that 'he *is* not there' may now be wrong, for he may have gone there in the meantime. A *past* non-apprehension, on the other hand, which alone is capable of determining *past* non-existence, has ceased to exist at the present—another state of mind has taken its place : and a non-existent mental process cannot be a cause of

[1]The *Mīmāṁsakas*, again. The passage which follows (*NK* p. 227 from l. 2 = Faddegon pp. 486 and 487) is difficult, and Faddegon's otherwise adequate translation of this section is in part confused here.

[2]Cf the statement of Sabara cited above, p. 328

apprehension[1]. Nor can the past non-apprehension be functioning now *as recalled by memory*, for the following reasons.—The opponent's doctrine is that the non-perception cannot be brought to consciousness by any other of the instruments of apprehension because it is a mere negation,—and if you suppose another ' non-apprehension ' to be the means of apprehending the first ' non-apprehension ' you land yourself in a *regressus ad infinitum*: and therefore non-apprehension must be thought of as determining its object *without itself being apprehended*, as is the case with the organs of sense[2]. " This being the opponent's view, it is impossible that there should now be memory of the past non-apprehension, seeing that it was not experienced when it was present: and there can be memory only of what was previously experienced[3].

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[1]Accepting Faddegon's emendation (p 486 footnote 3) *na cāvidyamānā pratītih kāranam bhavitum arhati* (text reads *avidyamānāpratītikāranam*) *NK* p 227 l 10.

[2]The instruments of apprehension are of two kinds first, those which are instrumental to knowledge without themselves being known—as the organ of vision is instrumental to perception without our making it an object of apprehension secondly, those which are instrumental to further knowledge through being themselves known—like the middle term of an inference (This classification of *pramānas* is given by Vācaspati Miśra, and is evidence of the vague character of the Indian conception of *pramāna* It is clear from this that *pramāna* cannot be rendered 'proof')

[3]At this point the opponent suggests that the past 'non-apprehension' may be regarded as still continuing in the mind, on the ground that non-apprehension of an object only ceases when the object is apprehended And as for the objection previously raised that a different state of mind has now supervened, there is no ground for supposing that a difference in the state of mind must imply a difference in the thing apprehended (?)—Śrīdhara replies that this suggestion is perhaps possible in the case under consideration, i.e. the case of a person who is asked 'Was X present', and who then realises that X was absent But how will the opponent deal with (*kaḥ pratīkāraḥ*, as rightly read by Faddegon) a case in which the absence is at first not grasped owing to the fact that memory did not bring up the idea of the absent thing (*pratiyogin*), but is realised subsequently as the result of apprehending the thing somewhere else? For in such a case the previous non-apprehension ceases owing to the present apprehension! The opponent cannot say that there *was* non-apprehension before, and that this, though no longer existing, is the cause of the knowledge of absence—unless he is prepared to admit that a man can still see after he has lost his sight!—Perhaps he will say that *present* non-apprehension is put an end to by the present

Srīdhara concludes that the process by which we afterwards apprehend that a thing *was* absent (like the process by which we now apprehend that a thing *is* absent) is *inference*. "What would have been remembered when another thing is remembered, and yet is not remembered, although the desire to remember is present, was absent at the time of the original experience. So-and-so is not remembered at such-and-such a place which is remembered, although the desire to remember is present. Therefore so-and-so was absent".—If it be objected that such an inference is doubtful (*anaikāntika*) because we sometimes cannot call to mind something which as a matter of fact was present and formed part of the original experience—as when we remember one verse of a couplet but fail to recall the other—, we shall add to our 'major premise' the proviso 'the aggregate of conditions for recall being the same in both cases' (*tulyasāmagrīkatva*). In the case of the two verses of the couplet the conditions are not the same, there having been a keener mental impression (*paṭutaraḥ saṁskāraḥ*) produced by the verse which is remembered. But where the two things were factors in a single cognition (*ekajñānasaṁsargi*) as in the case under consideration, this proviso is necessarily satisfied : the aggregate of conditions in the apprehension of one was identical with the aggregate of

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apprehension, but that the *past* non-apprehension still subsists and that it is by this, which alone is fitted to determine a non-existence belonging to past time, that the thing's absence on the previous occasion is determined — The suggestion betrays remarkable knowledge and insight ! Non-apprehension is 'antecedent absence' (*prāgabhāva*) of apprehension, and as such has its termination in apprehension, and is one and indivisible, not to be distinguished by temporal differences into 'past non-apprehension' and 'present non-apprehension' The exceeding subtlety of the distinction involved in saying that the present non-apprehension comes to a stop while the past non-apprehension subsists is of a kind only to be appreciated by persons who (like the opponent) have wits as sharp as the point of a blade of *kuśa*-grass (*kuśāgrīyabuddhi*) !

This passage (*NK* p. 227 ll. 14—25) was not worth embodying in the above summary of Śrīdhara's argument, but is given as a sample of tenth-century polemics.

conditions in the apprehension of the other: and so the aggregate of conditions for recall will be identical.—The case of recalling verses is different, because the original apprehension of them was not unitary but *successive* (*kramena pathyante naikajñānasaṁsargiṇi*.)[1]

—Here, as always, it is necessary to distinguish the two senses of *pramāṇa*, as mere instrument of cognition (psychological) on the one hand, and as ground of belief (logical) on the other hand. In the latter sense Śrīdhara may be thought to prove his point; for the setting out of the logical grounds for belief in a negative judgment will take the form of an inference. 'How do I know that it is absent? because if it had been present I should have seen it, or remembered it'. There will always be, however (though Śrīdhara will not admit it) a logical possibility of error in the inference, since it is impossible so to formulate the 'major premise' as to exclude *all* possibility of exception[2]. Practical or moral certainty (i e. opinion that a wise man will act on) can be achieved; but logical certitude in the concrete is an idol of the theatre.—But, apart from this objection, Śrīdhara's argument proves too much: for the ground of our belief in perception[3] (which is admitted to be an independent *pramāna*) is no less inferential than the ground of our belief in 'non-apprehension' (which is denied to be an independent *pramāna*). We may support our positive perceptual judgments by arguing 'if it were not there, I should not see it', no less than we support our negative judgments by arguing 'if it were there, I should see it'.

[1]The psychology is wrong; but the distinction between 'simultaneous' and 'successive' association is noteworthy.

[2]The normal man fails to see what is before his eyes in cases of sleight of hand. The suggestible patient cannot see what is before his eyes when he is told that it is not there. Undetected physical conditions and psychological inhibitions *may* be present to invalidate the negative judgment and the inference by which we justify our belief in it.

[3]And in memory. The Indian schools refuse the name of *pramāṇa* to memory. on the ground that the original apprehension was the *pramāṇa*.

Perception is no more, and no less, independent of inference than 'non-apprehension' is. And in both cases it is equally impossible to exclude the chance of error: for sometimes we see what is not there, just as sometimes we do not see what is there.

Taking *pramāṇa* in the psychological sense of instrument of cognition the position of those who like the later *Naiyāyikas* assert that we *perceive* absence would seem to be justified. There is a felt difference in a room from which a picture or ornament has been removed· and this felt difference is psychologically something positive, and becomes the instrument of negative judgement[1].

(*vii*) *Aitihya—Tradition*[2]

PBh p.230 l.24 "Tradition also, when true, is nothing but Credible Testimony"

When false, the question whether it is a *pramāṇa*, i.e. an instrument of *valid* cognition (*pramā*) of course does not arise. When true, it is indistinguishable from *śabdapramāṇa;* and as such is reducible to inference, according to Praśastapāda. Tradition is mentioned among the claimants to the rank of *pramāṇa* in *Nyāya-sūtra* II.ii.1-2, and its claim is rejected as not being different from 'word'—which the *Nyāya Sūtra* admits as a distinct *pramāṇa*. The reason for distinguishing it from *śabda* appears to have been that tradition has no assignable author; whereas 'word' is *somebody's* word—so that the question whether it is the word of a reliable person (*āptavacana*) can be raised. Thus Vātsyāyana[3] characterises tradition as having no assigned author because it has been handed down through a succession of pronouncements.

[1]See *NS* V i. 31, where this is explicitly stated *infra*, pp 363—365.

[2]The word is derived from *iti ha*, two particles Cf. the word *itihāsa* meaning 'legend' the word is simply the *iti ha āsa*, 'and it came to pass', with which traditional tales are introduced.

[3]*NBh.* p. 100 l. 8 *iti hocur ity anirdiṣṭapravaktṛkaṁ pravāda pāramparyam aitihyam.*

CHAPTER VI

SOPHISTICAL REFUTATIONS.

(i) Equivocation (*chala*) —(ii) The sophistical or dialectical refutations (*jāti*). —(iii) The six steps in *tu quoque* dialectic (*ṣaṭpakṣī*) —(iv) Defeat in debate (*nigrahasthāna*)

The three heads *chala*, *jāti* and *nigrahasthāna*, among the sixteen 'categories' of the *Nyaya*, correspond to the *Sophistici Elenchi* of the Aristotelian *Organon*. The second chapter of the first book of the *sūtras* distinguishes sophistry and cavilling (*jalpa* and *vitaṇḍā*) from discussion (*vāda*)[1] on the ground that the sophistical argument, though it has the form of the five-membered syllogism proper to 'discussion', uses as its means of proof equivocation (*chala*), sophism (*jāti*) and futility (*nigrahasthāna*) : while cavilling is sophistry which makes no attempt to establish the position counter to that of the theory attacked (*pratipakṣasthāpanāhīna*). The chapter then gives an account of Equivocation; but contents itself with barely defining Sophism and Futility, the full treatment of these two 'categories' being reserved for the last or fifth book of the *sūtras*, which has these for its sole topic

SECTION 1 EQUIVOCATION

Equivocation is defined as verbal contradiction through the possibility of taking the words in an alternative sense. It is divided into three kinds, equivocation in respect of words, equivocation arising from a common term, and equivocation about a metaphorical expression.

[1]Cf Plato, *Resp*, 539 B and C, where discussion is contrasted with refutation and contradiction.

1. *Vākchala*

Equivocation in respect of words is defined in the *sūtra* as the supposition of something different from that intended by the speaker in the case of a thing named by a homonym. Vātsyāyana cites as an example the sentence *navakambalo 'yam māṇavakaḥ*, by which the speaker means " this man has a new blanket " (*navaḥ kambalaḥ*). But though in the resolution of the compound the meaning is unambiguous, the compound *navakambala* is itself ambiguous (*vigrahe tu viśeṣo, na samāse*), and the opponent unfairly resolves it as *nava kambalāḥ*, taking it to mean " this man has nine blankets " : *unfairly*, because no word, as such, is particular in its meaning; which becomes determinate only through the context (*arthaprakaraṇādisahakārī viśeṣe vartate*), Vācaspati explains.

2. *Sāmānyachala*.

This is defined as the supposition of an impossible meaning, resulting from the application, to the thing that is meant by the speaker, of a common or class character which covers more than the thing meant. For example, the statement "this Brahman is learned" is unfairly taken to imply that *any* Brahman (including ignorant ones) is learned · *unfairly*, because it makes the unwarranted assumption that Brahmanhood was mentioned as causally connected with the possession of learning; whereas in fact the speaker used the term 'Brahman' simply in explanation of the thing referred to (*viṣayānuvāda*) without any intention to speak of the cause (*avivakṣitahetukasya*).

The trick here consists in taking a reference to attendant and accidental circumstances as a statement of something essential.

3. *Upacārachala*

The critic takes in its literal sense, and so is able to deny, a statement which the speaker obviously intends in a figurative sense. The example given is " the platforms shout", which of course is used in the sense "the people on the platforms shout ". The term 'platforms' is intended in the secondary sense and understood in the literal sense (*bhaktyā prayoge prādhānyena kalpanam. NBh* p.57 ll. 15-16). The procedure is futile because unless you contradict the speaker's words in the sense in which he intends them you are not contradicting him at all.

The first and third of these are plainly fallacies *in dictione*. The second is equally so, though less plainly : for it turns on a deliberate misunderstanding of the structure of the sentence : for a sentence which is obviously intended to be constructed " this man—the Brahman—is learned ", is construed into the form " this man, being a Brahman, is learned ". It is therefore rightly classed as a case of *chala*, i.e. fallacy *in dictione*. It can be brought under the rubric of amphiboly, in the Aristotelian classification of the fallacies *in dictione*.

SECTION 2. THE SOPHISTICAL OR DIALECTICAL REFUTATIONS (*JĀTI*)

The definition is given by anticipation at I.ii.18—*sādharmyavaidharmyābhyāṁ pratyavasthānaṁ jātiḥ*,—'the *jāti* is a counter-argument through likeness and difference'. Of course, on the *Naiyāyika* theory of inference, strictly logical arguments also proceed through likeness and difference. What differentiates the dialectic devices to which the common designation *jāti* is given, is the nature of the likenesses and differences on which

these dialectic semblances of logical demonstration rely. Vātsyāyana says on this *sūtra* :—

"The dialectical consequences which are *generated*[1] when a logical reason is employed are called *jāti* (*prayukte hi hetau yaḥ prasaṅgo jāyate, sa jātiḥ*). Where the reason is 'a proof of the *probandum* from likeness to the example' (*NS* I.i.34), the *jāti* is a counter-argument relying on some unlikeness to the example. Where the reason is 'a proof of the *probandum* from unlikeness to the example' (*NS* I.i.35), the *jāti* is a counter-argument through likeness to the example. A *jāti* is thus something *generated*[1] from opposition (*pratyanīkabhāvāj jāyamāno 'rtho jātir iti*).

The last *sūtra* of the first book states that there are many kinds of *jāti*, and of *nigrahasthāna*, arising from the variety of likenesses and differences[2] which may serve as the ground of dialectical demurrers (*jāti*), and from the various sorts of misunderstanding and failure to understand which constitute futility (*nigrahasthāna*). But, contrary to the usual practise of the first book, no enumeration or division of these two 'categories' is here given. On the other hand, when we come to the fifth book which treats of the varieties of *jāti* and *nigrahasthāna*, we do get a division of *jāti's* (V.i.1) and a division of *nigrahasthāna's* (V.ii.1), followed in each case by a series of definitions of the different kinds of each. And these two series of definitions constitute the whole of the two sections of the fifth book, so that the book reverts to

[1]Vātsyāyana clearly suggests an etymological explanation of the term *jāti* in the word *jāyate* But although *jāti* is derived from *jan*, there is nothing to recommend the suggestion that this particular sense of *jāti* means 'something generated or produced' from a logical reason .

Possibly the word *jāti*, general nature, comes to have the meaning of a merely dialectical argument because such arguments arise from appeal to *mere* generalities, which "give forth directions too much at large" to constitute a determinate reason (*viśeṣahetu*) capable of leading to a determinate conclusion.

[2]*NS* I. ii. 18 *tadvikalpāj jātinigrahasthānabahutvam.*

enumeration and definition (*uddeśa* and *lakṣaṇa*), which are the characteristics of the first book; though it no doubt also contains that 'investigation' or examination of concepts (*parīkṣā*) which characterises books II—IV[1] This might suggest a suspicion that the fifth book is a later addition. But the attempt to keep definition altogether distinct from examination is one that is bound to break down in places: and this is notably the case in dealing with the dialectical types of argument, the treatment of which, like that of fallacies, is inevitably largely a matter of classification.

As to the postponement of the classification, the mere length of the enumeration made it almost inevitable that it should form a separate book; and the same reason would have suggested the convenience of postponing a disproportionately long treatment of two categories and of proceeding at once to the 'examination' of the other categories in the second book There is therefore no solid ground, so far as these considerations go, for the view that the fifth book is a later addition. It has, so far, as good a claim to be treated as an integral part of the early system as any of the other books.

Nor does it seem to be true that the topic is a relatively unimportant one, which need have formed no essential part of the original system, but may rather be regarded as the product of a subsequent scholasticism. The truth rather is that it was very necessary at the outset to settle what was fair argument and what was not, and that the topic lost its importance for the later schools just because the system had from the outset dealt so thoroughly with sophistical opponents that its account of the matter was embodied even in the subsequent logic of

[1] See Jhā, *Translation*, Vol. iv p 279, footnote. He states that the *Pariśuddhi* discusses the question whether the subject of the fifth book is definition or examination, and that Udayana decides that it is definition He also cites the reasons given by Vācaspati for the postponement of the

those very opponents—that is to say the Buddhists—against whose methods we may perhaps conjecture that the fifth book of the *Nyāyasūtra* was largely directed. Aristotle devotes as much space proportionately to the *Sophistici Elenchi*[1] as the *Nyāyasūtra* does to the doctrine of *jāti* and *nigrahasthāna;* and if we are to condemn the latter as serious trifling we cannot exempt Aristotle's treatise from the same condemnation. But the fact that in both systems of logic[2] we are confronted with the same phenomenon of a careful attention to mere sophistry would seem to indicate that in the beginnings of systematic logic (at any rate in a social environment in which inordinate importance was attached to even a rhetorical success in debate, as was the case in ancient Greece and India) the exposure of the sophistical method was a serious task[3].

The names of all the twenty-four *jāti's* end in the word *sama,* which denotes equality or 'parity'[4], and seems to signify that the defendant's reasoning (*sthāpanāhetu*) is equalised or counter-balanced by a parallel dialectical semblance of proof. The names may usually be translated 'the counter-argument by . . .',

[1]I do not mention the *Topics*, because Indian Logic did not develop a doctrine of dialectical argument from 'common places',—as opposed to logic proper on the one hand and to sophistic on the other It is true that the *Nyāyasūtra* advocates the use of sophistry and wrangling for the defence of truth likening it to the hedge of thorns with which we protect the young shoots (*NS* IV. ii. 50). But this is incidental, and only means that you should be able to use your enemy's weapons. It is nowhere suggested that the use of dialectical arguments is intrinsically justifiable as leading to probable conclusions where demonstration is not available.

[2]There is nothing to show that the parallelism between the systems is due to historical contact. There is general likeness between the *Sophistici Elenchi* and the fifth book of the *Nyāyasūtra*. But this sort of thing is not evidence of connection.

[3]Cf. H. W. B. Joseph, *Introduction to Logic*, (2nd edn., Oxford, 1916) pp. 586-587. See also page 368 *infra*.

[4]As translated by Jhā.

e.g. 'the counter-argument by similarity', and so on. The whole list is as follows :—

NS. V.i.1.

1.	*sādharmya-sama*	13.	*anutpatti—*
2.	*vaidharmya—*	14.	*saṁśaya—*
3.	*utkarṣa—*	15.	*prakaraṇa*[1]*—*
4.	*apakarṣa—*	16.	*ahetu—*
5.	*varṇya—*	17.	*arthāpatti—*
6.	*avarṇya—*	18.	*aviśeṣa—*
7.	*vikalpa—*	19.	*upapatti—*
8.	*sādhya*[1]*—*	20.	*upalabdhi—*
9.	*prāpti—*	21.	*anupalabdhi—*
10.	*aprāpti—*	22.	*anitya—*
11.	*prasaṅga—*	23.	*nitya—*
12.	*pratidṛṣṭānta—*	24.	*kārya—*

That is to say, the sophist or dialectician (*jāti-vādin*) may give the appearance of a refutation (*dūṣaṇābhāsa*) of even a valid argument by the use of one of these 24 dialectical devices[2] :—

1. He may produce an irrelevant *likeness* to non-P,
2. or an irrelevant *difference* from P.
3. He may *add* to S qualities possessed by P's which are not proved by M,
4. or *subtract* from S qualities which it possesses but which are not possessed by P's.
5. He may argue that since P as the thing to be proved is to be shown in S, it is equally *to be shown* in the evidential cases adduced,
6. or that if P is not to be shown in the evidential cases, it is equally *not to be shown* in S.

[1]To be distinguished from the two types of fallacious middle term (*hetvābhāsa*) which bear the same names, and are described in *NS* I. ii. 7-8.

[2]For the Sanskrit names of each type see corresponding numbers in the list given above.

7. As M may optionally be thought of as accompanied or not-accompanied by an accidental circumstance, Y, so there is an *equal option* of supposing M to be P and to be non-P.

8. Since the evidential cases are *ex hypothesi* like S, and since S is only doubtfully P (*saṁdigdhasādhyavat*), P being *probandum*, —then P is *equally probandum* in the evidential cases.

9. M and P are already *united*, so that there is no passage from M to P;

10. or, M and P are *disunited*, so that M will never prove P.

11. The defendant does not prove that his proof is proof, so that there is a *further question* to be settled,

12. and, if there is to be no proof that proof proves, a *counter-instance* may always be adduced (the question of its cogency will never arise, since we need not show that our so-called proof *is* a proof).

13. A cause becomes a cause by producing its effect, and therefore prior to the production of the effect the cause is no cause: and so (since effects cannot be produced in the absence of causes) there is *no production* of effects.

14. Any inference is inconclusive because any S will possess some point in common both with P's and with non-P's: and a quality which is thus common will always give rise to *doubt* whether S is P or non-P.

15. Any middle term is exposed to an antinomy and therefore only raises, without settling,

the *question-at-issue*. (This means that if you can find an M which is P, you can always—e.g. under No. I—find in S another quality which is non-P. So there will always be what later logic called a *satpratipakṣa*, i.e. an antinomy.)

16. The supposed *probans-probandum* relation implies antecedence and sequence and yet is destroyed by the introduction of temporal distinctions: and so the reason given is always *no reason*.
17. Any argument carries with it an *implication* of the contradictory. If the defendant says that S is P so far as it is M, then he implies that it must be non-P so far as it is other than M.
18. If resemblance in a point makes things identical in another point, then there must be complete *non-difference* of all things (so far as they resemble each other at all).
19. It is *arbitrary* whether you choose M as your middle—thereby proving that S is P—or some other quality of S, such as Y—thereby proving that S is not P. Therefore the conclusion is a mere *contingency* (you *may* draw it, but you *need* not).
20. You have experience of P in the presence of M: but you sometimes have *equal experience* of P in the absence of M (P following from various conditions—'Plurality of Causes').
21. So far as an argument relies upon non-perception as proving non-existence of something, it can always be retorted that there is *equal non-perception* of your non-perception—

which does not therefore exist. *Ergo*, that which you assert to be non-existent may be existent after all.

22. It can be argued that everything is *equally non-eternal* because everything has some resemblance (e.g. in respect of existence or knowability) to such non-eternal things as a pot,

23. or that, since what is non-eternal is *eternal* in its non-eternality (truth being eternal), everything is *equally eternal*.

24. Since the coming into existence of a new product cannot be distinguished from the mere manifestation of the already existent, what looks *like an effect* may after all not be an effect. (So that you might as well maintain, with the *Sāṁkhyas*, the doctrine of *satkāryavāda*, as maintain with the *Naiyāyikas* the doctrine of *asatkāryavāda*.)

The fifth book of the *Nyāyasūtra* and Vātsyāyana's comment on it contain some interesting matter. The following observations deal with points of interest which are raised in connection with certain of the *jātis*.

Nos. 1 and 2. Sādharmyasama and vaidharmyasama. Parity of likeness and unlikeness go together. If a conclusion is proved *affirmatively* or by likeness to the example, it will always be possible to point to (*a*) a likeness, or (*b*) an unlikeness of the case in question to other well-known examples, in proof of the opposite: and similarly if the conclusion is proved negatively or by difference from the example. Thus let it be argued that the soul is active, because it possesses qualities which are the cause of activity, like a piece of matter. It can be retorted that (*a*) the soul is like ether, which is *inactive*, in respect of

being all-pervading; and that (*b*) it is unlike a piece of matter which *is* active, in respect of not being of a determinate shape. Similarly let it be argued, ***negatively***, that the soul is inactive, because it is all-pervading, ***unlike*** a piece of matter. It can be retorted that (*a*) the soul is *unlike* ether, which is inactive, in respect of having qualities which are the cause of activity (e.g. volition, and merit-demerit); and (*b*) it is *like* a piece of matter, which is active, in respect of activity-causing qualities (which, in the case of the piece of matter, are represented, as Vācaspati points out, by conjunction with a tangible object which possesses *vega*, energy or velocity).

The *sūtrakāra's* solution of this difficulty is obscure: *gotvād gosiddhivat tatsiddhiḥ* (*NS* V.i.3),—"the conclusion (of a valid syllogism) is proved in the way in which a cow is proved, from its cow-hood[1]". This suggests a very sterile view of inference; and it is not as a matter of fact the sort of inference contemplated in the *trividham anumānam* of *NS* I.i.5. In any case it seems to have had no influence on the theory and practice of the *Nyāya* school: though the later *Vaiśesika* school made use of merely formal inference of this sort to 'prove' that a thing is what it is because it is not other than what it is; and the habit of such demonstration by identity is a deformity in such a *Vaiśesika* manual as the *Saptapadārthī* of Śivāditya.

Vātsyāyana explains the *sūtra* to mean that inconclusiveness (*avyavasthā*) will be found when a proof

[1]Vātsyāyana on *NS* II. ii 62 says that *jāti* cannot be apprehended apart from the individual (*vyakti*) and the 'form' (*ākṛti*); though both he and the *sūtrakāra* (*NS* V i. 14) accept the doctrine that the universal (here called *sāmānya*) is an object of perception (*aindriyaka*). and on *NS* II. ii. 65 he says—following the *sūtra*—that the *ākṛti* or determinate collocation of parts is the sign of the universal (*jātiliṅga*), and adds that *śirasā pādena gām anuminvanti*, "people infer a cow by means of its head and foot": which is not quite easy to reconcile with the present *sūtra*. Vātsyāyana on *NS* II. ii 65-66 echoes the language of the *Vaiśeṣikasūtra* (as pointed out above, page 7 note) in describing *jāti* as *sāmānyaviśeṣa* and characterising it as *pratyayānuvṛttinimitta*.

is proposed by *mere* likeness or by *mere* difference (*sādharmyamātreṇa vaidharmyamātreṇa ca sādhyasādhane pratijñāyamāne*), but will be impossible where a peculiar character (*dharmaviśeṣa*) is taken as the middle term or *probans*. The proof of being a cow is from that likeness to other cows which constitutes cow-hood, and not from its having a dewlap, etc.[1].

He himself refers us to that section of his comment in which he dealt with the 'Members' of syllogism. The reference is to *NBh* p. 45 ll.6—10, on *NS* I.i.39; which may be rendered :—

" When the reason and the example are correctly taken (*pariśuddhi*) they do not give rise to the various dialectical devices and futilities which spring from the option of a counter-argument based on likeness and unlikeness. The fact is that the dialectician's (*jātivādin*) counter-argument presupposes that the relation of *probans* and *probandum* in the example has not been established. If the *probans-probandum* relation of the two qualities, as it exists in the example, is apprehended as established, then it is a *probative* character that is taken as reason or middle term, and not a *mere* likeness nor a *mere* difference (*sādhanabhūtasya dharmasyopādānam, na sādharmyamātrasya na vaidharmyamātrasya vā*)". This is a plain statement of difference between a properly logical argument and mere dialectic : though it must be admitted that Vātsyāyana does not succeed in telling us how we are to distinguish a *sādhanabhūtadharma* or *viśeṣahetu* from a *mere* likeness or difference. That is, he does not give us any such canon of argument as the *trairūpya* (see however under No. 22 *infra*). A justification for not telling us how proof proves is perhaps to be found in the interesting piece of Socratic

[1] I do not see how this is to be reconciled with Vātsyāyana's own statement as cited in the preceding note. I take it that he here slips into a point of view which he did not really hold,—under the immediate necessity of finding a meaning for the *sūtra*.

questioning with which he replies to No. 11, the *prasaṅgasama jāti*, the burden of which is to demand from the *Naiyāyika* the credentials of the *dṛṣṭānta* or probative instance on which his syllogism relies. " 'What persons take a light, and for what purpose?' 'Persons who want to see, for the purpose of seeing something that is to be seen'. 'Then why do not people who want to see a light take another light (to see the first light by)?' 'Because a light is seen without another light, and so taking a light to see a light by is useless'. 'Well, for what purpose is the example employed (in a syllogism)?' 'For the purpose of giving knowledge of something not known'. 'Then for what purpose is a statement of proof (*kāraṇāpadeśa*) required in the case of the example, if the example is something *known* (*prajñāta*) which is adduced for the purpose of giving knowledge (of what is not known. *prajñāpanārtham sc. aprajñātasya*)? In fact an example is defined as something in regard to which there is unanimity of lay and learned (*sa khalu laukikaparīkṣakānāṁ yasmin arthe buddhisāmyam, dṛṣṭānta iti*). Statement of proof is useless for the purpose of giving knowledge of what is so defined'. This is the answer to the *prasaṅgasama*''[1].

No. 8 Sādhyasama. 'Parity per *probandum*' (Jhā) consists in attributing to the Example, not the

[1]The dialectician's assertion here is, not that the particular *dṛṣṭānta* used by the defendant is defective, but that any *dṛṣṭānta* is as such defective,—*kāraṇānapadeśāt*, "because it does not declare a cause", as the *sūtra* puts it. or, as Vātsyāyana puts it, "because a reason is not declared, and without a reason there is no establishment (*hetum antareṇa siddhir nāsti*)" That is why Vātsyāyana assigns to the second member of the syllogism the specific function of declaring probativeness (*sādhanatāvacana*). Using the language of the present passage he might have said that its function is *kāraṇāpadeśa* or *hetvapadeśa*, i.e to declare that there is a *hetu*, a real reason or *probans*, manifest in the *dṛṣṭānta*

-he present passage, in conjunction with the use of *apadeśa* in the lists of *tantrayukti's* in the sense of 'pointing out a cause'; appears to throw light on the use of the words *apadeśa* and *anapadeśa* in the *Vaiśeṣika Sūtra*, in the senses of *hetu* and *hetvābhāsa*.

property P as such, but the property P *as probandum*,—as major term of the syllogism, i.e. as something that is to be proved. (" You say that the example has the property to be proved. But the ' property to be proved ' is still to be proved, and so you cannot be certain that the example possesses it ").—If the soul is like a piece of matter, then the piece of matter is like the soul. But the soul is the *sādhya*, that of which the property P is to be proved. *Ergo*, the example resembles it in being something of which the property is to be proved. And if you say: "But the piece of matter is not like the soul in the respect of being the *sādhya* (= *sādhyadharmin*, or *pakṣa*) of the argument", the opponent will say " then neither is the soul like the piece of matter in the respect of being active".

The real difference between the *sādhyasama hetvābhāsa*[1] of Book II and the *sādhyasama jāti* of Book V is this, that the former is a just charge of *petitio principii* brought against a particular syllogism, while the latter is a mere dialectical device for bringing the same charge, unjustly, against any syllogism whatever, good or bad.

No. 14 *Saṁśaya-sama.* The *Naiyāyika* has argued that sound is non-eternal because it follows upon volition, like a pot. The opponent cannot show that this argument is *savyabhicāra*: but he says that *another* middle term could be taken which *is savyabhicāra*, and therefore generates doubt; for instance, sound is perceptible by sense,—but things perceptible by sense are sometimes eternal (as in the case of Universals)[2] and sometimes non-eternal (as in the case

[1]For which see page 197 *supra*.

[2]Certainly a reference to the doctrine as taught in the *Vaiśeṣika* school.

of a pot). This creates a doubt as to whether sound is or is not eternal.

Uddyotakara points out that the difference between this sophism and No. 1, the *sādharmyasama*, is that the latter arises from *ekasādharmya* (taking a middle term which is found with non-P, instead of with P), whereas the present dialectical device consists in taking as middle term a quality of S which is common both to P and to non-P (*ubhayasādharmya*).

This is a dialectical device for attributing to any argument the fallacy of *savyabicāra*. It is related to that fallacy just as the *sādhyasama jāti* and the *prakaraṇasama jāti* are related to the correspondingly named fallacies.

The next *sūtra* (V. i. 15) gives the obvious solution of this sophism. " Although doubt arises from a quality common (to P and non-P), there is no doubt after the character which differentiates (S from non-P) has been grasped". The *sūtra* is an abnormally long one and adds an *argumentum ad hominem*[1] against the *Bauddha* who uses this piece of dialectic : " And since you do not admit the eternality of the universal you cannot contradict our argument on this ground (i.e. on the ground that sound resembles the universal, and that the universal is eternal)".

No. 15 *Prakaraṇasama.* This is a dialectical device for attributing the *prakaraṇsama fallacy* [see p. 195] to *any* argument. Since, even in the case of a valid argument, such as ' sound is non-eternal, because it is a product of volition', there will be found some quality in which the minor term (S) resembles non-P's [2] (as well as a quality in which it

[1]Vātsyāyana does not comment on this part of the *sūtra*. Jhā's translation seems to misunderstand it.

[2]As shown under No. I, *sādharmyasama*. Sound resembles universals (which are eternal) in being perceptible. So that sound presents the com-

resembles P's *ubhayasādharmya*), it can always be maintained that even a valid middle term merely 'starts a question' (*prakaraṇaṁ pravartayati*), i.e. gives rise to an antinomy (*ubhayasādharmyāt prakriyāsiddheḥ prakaraṇasamaḥ*. *NS*. V. i. 16).

No. 16 *Rejoinder that a reason is no reason* (*ahetusama*) *NS V*. i. 18.

Any so-called reason is just like a reason which is *no* reason. How so?—*traikālyāsiddheḥ*,—because the reason as such is *asiddha*, not established to exist, at any of the three points of time, past, present and future

For the reason is the *probans*, and it must exist either before, or after, or simultaneously with, the *probandum*. If *before*, there is as yet no *probandum* for the so-called *probans* to prove, and therefore it is not a *probans*. If *after*, since the *probans* does not yet exist there is nothing of which the so-called *probandum* is the *probandum* (and therefore it cannot be called *probandum*, and so the *probans* being left without a *probandum* is not a *probans*). If *simultaneously*, then, since both exist together, which is *probans* of which? and which is *probandum* of which? A reason, therefore, cannot be distinguished from what is not a reason (*hetur ahetunā na viśiṣyate*). The *ahetusama* is a rejoinder based on the resemblance of a reason to what is not a reason (*ahetunā sādharmyāt pratyavasthānam ahetusamaḥ*).

[This sounds Buddhistic, and resembles the kind of dialectic employed by *Nāgārjuna* against the validity of reasoning, in his *Mādhyamika Kārikā*.]

bination of perceptibility with dependence-on-volition. If perceptibility were *confined* to eternal things, there would be a genuine antinomy (*viruddhāvyabhicārin*, *satpratipakṣa*) (or, as Praśastapāda puts it, the combination of properties would be, as such, peculiar to sound (*asādhāraṇa*), and there would be the *anadhyavasita* fallacy). But of course perceptibility is not *avyabhicārin* with reference to eternality.

Solution of No. 16
NS. V. i. 19-20.

It is not true that the reason is not established to exist at any of the three points of time. How so? Because it is by a *probans* that any *probandum* is proved! And this huge perceptual universe serves as an example of the truth that there is a *means* of denying things that are to be denied, and a *means* of knowing things that are to be known. As to the query—In the absence of the *probandum*, of what will the *probans* be the *probans*?—the answer is that it will be the *probans* of whatever is to be denied or whatever is to be known.

The solution so far is simply an appeal to the fact that knowledge does exist; and therefore *means* of knowledge. Sūtra 20 adds the obvious *argumentum ad hominem*:—

Since your rejoinder condemns reasoning as such, contradiction also becomes impossible, and therefore you cannot contradict what you are setting out to contradict! (You have yourself given a *reason* for denying the validity of reasoning: therein contradicting yourself.)

No. 17 *Rejoinder by Implication* (*arthāpattisama*)
NS. V. i. 21.

Implication will always convey the contradictory of any conclusion, and so every argument is exposed to the *arthāpattisama* dialectic.

Thus, if you argue that sound is non-eternal because of its likeness to non-eternal things, then from your very statement there emerges the implication (*arthād āpadyate*) that, because of its likeness to *eternal* things, it is *eternal*! And as a matter of fact sound *is* like an eternal thing, namely, ether, in respect of being intangible (this however is urged by way of another piece of dialectic, *viz.*—No. I, *sādharmyasama*. It is mentioned here merely as confirming the result of the 'rejoinder by implication').

The use of *arthāpatti* is different from and more primitive than its use in the classical *Nyāya*, and the *Mīmāṁsā*. In the *Nyāya Sūtra* and *Bhāṣya* the term means nearly what it meant in the lists of *tantrayukti* in *Kauṭilya* and *Suśruta*, viz., the verbal or semi-logical implications of a statement. When a man says 'S is P, because it is like X,' he *may* always be taken to imply that in so far as it is *not* like X it is *not* P. There is of course no logical necessity about such 'implication', as the *Naiyāyika* points out in the solution given in the next *sūtra*.

Solution of No. 17
NS. V. i. 22.

In the first place, if we are to read into statements meanings which are not stated, then *we* can read into the opponent's statement that sound is non-eternal because it resembles products, like a jar, the implication that it is eternal in so far as it resembles in respect of intangibility eternal things like ether: which of course is destructive of his thesis (*pakṣahāni*).

And yet we can read this implication into his statement,—just because it is *not* stated! In the second place, such implications from bare opposition (*viparyayamātrād arthāpattiḥ*) are not logically cogent but inconclusive (*anaikāntika*). In the statement that solid bodies fall it is surely not implied that water, which is not solid but fluid, does not fall!

No. 18 *Rejoinder by Non-difference* (*aviśeṣasama*) *NS*. V. i. 23.

One quality is found common to sound and such things as pots, and on the strength of it you infer that sound is *non-different* from these things in being non-eternal.

Very well then—you expose yourself to the dialectical rejoinder that everything is non-different from everything else: because the one quality of

'existence' is found in all things: and on the strength of this we may infer that *all* things are non-different, i.e. identical.

Reply to No. 18 NS. V. i. 24. We infer *another* quality, viz., non-eternality, from the quality of 'being produced by volition' which is common to pots, etc., and sound. But there is no other quality common to *all* things which has as its cause the property of 'existence', so that we could infer the 'non-difference' which is asserted —You may say that non-eternality itself is this other property in respect of which all things are non-different. But the inference to the conclusion that all things are non-eternal could have no evidence in support of it other than the subject ('all things') itself (*pratijñārthavyatiriktam anyad udāharaṇaṁ nāsti*)[1]. And if there is no example a reason cannot be valid (*anudāharaṇaś ca hetur nāsti*). And you may not take part of your subject for an example: for that which is to be proved cannot be an example (*pratijñaikadeśasya codāharaṇatvam anupapannam, na hi sādhyam udāharaṇaṁ bhavati*).

And since existent[2] things are both eternal and non-eternal, the conclusion that *all* things are non-eternal is impossible. Therefore the inference of the identity of everything, from existence, is a meaningless proposition.

And if our opponent maintains that all things are *non-eternal* because they exist, he has admitted thereby that *sound* is non-eternal: and it becomes

[1]That is to say the argument would come under Uddyotakara's rubric of *avidyamānasapakṣavipakṣa*, an argument in which neither positive nor negative evidence is available, and which is therefore invalid It was afterwards known as the *anupasaṁhārin* fallacy.

[2]The true reading is supplied by the Benares 1920 edition—*satas ca nityānityabhāvād, etc.* The Vizianagram text has *tatas ca, etc.*

impossible for him to deny this position (which he desires to deny)[1].

The main interest of this passage is (i) the anticipation of later doctrines as to the necessity of examples in a valid inference—if there is neither *sapakṣa* nor *vipakṣa* there is no evidence at all, and therefore no inference. Later logicians however sometimes admitted the validity of an inference about 'everything'—e.g. all things are nameable, because they are objects of knowledge. (ii) There is a reference to the argument from the nature of the existent to its transitory character (*kṣaṇikatvavāda*) But the argument is so formalised in its presentment that it loses all the force which it has (for instance) as presented in the chapter on the *Bauddhas* in the *Sarvadarśanasaṁgraha*.—It may fairly be suspected that this often happens in this chapter on *jāti*; and that many of the dialectical difficulties here dealt with were much more genuine difficulties than they appear to be when presented formally as this or that '*jāti*'.

No. 19 *Rejoinder by Contingency of Cause (Ground)*: *or, Equal Possibility (upapattisama). NS.* V. i. 25.

The causes of either of the two alternatives are to be found in the subject of inference: if you happen to take one you get one result, and if you happen to take the other you get the contradictory result. Thus, if you take the fact that sound is a product of volition—which is a cause or ground of non-eternality—you will infer that sound is non-eternal. But it is equally open to you to take the fact that sound is intangible—which is a cause or

[1]The *Bauddha* would not wish to deny this; though the *Mīmāṁsaka* would. It looks as if the dialectical opponent here were a *Mīmaṁsaka*, if the text is right. But perhaps the *Bauddha* would wish to deny it merely because the *Naiyāyika* maintains it.

ground of eternality: and then you will draw the conclusion that sound is eternal. Such rejoinder through possibility of taking the ground of either conclusion (*ubhayasya kāraṇopapattyā pratyavasthānam*) constitutes "the dialectic of equal possibilities" (*upapattisama*)[1].

No. 20 *Rejoinder by Plurality of Causes* (*upalabdhisama*) *NS*. V. i. 27.

This rejoinder is based on the fact that there is experience (*upalabdhi*) of the effect even in the absence of the alleged cause (*nirdiṣṭakāraṇābhāve 'py upalambhād upalabdhisamaḥ*). The ground which the defendant alleges for the non-eternality of sound is that it is a product of volition. But non-eternality of sound is found also in the case of the sound made by the boughs of trees broken off by the wind—in the case of which the alleged cause of the non-eternality is not present. *Upalabdhisama* is the name for the retort based on the fact that we perceive the *probandum*-quality even in the absence of the alleged *probans* (*nirdiṣṭasya sādhanasyābhāve 'pi sādhyadharmopalabdhyā pratyavasthānam upalabdhisamaḥ*)

Reply to No. 20 *NS*. V. i. 28.

The defendant's position is not contradicted by the fact that that property arises from other reasons as well (*kāraṇāntarādapi taddharmopapatter apratiṣedhaḥ*).—The man who argues that sound is eternal because it follows on volition means to assert that it follows from *a* cause, and not that the effect is restricted to this particular cause (*na kāryasya*

[1]Both Uddyotakara and Vācaspati Miśra felt some difficulty in distinguishing this from the *prakaraṇasama jāti*, No. 15. The difference (which both of them indicate) is simply that in No. 19 the emphasis is laid on the *potentiality* of an antinomy, whereas in No. 15 the *actual* antinomy is asserted as the basis of the rejoinder. The point in No. 19 is the *arbitrariness* of choosing one out of two possibilities. Nothing is said of the cogency of either possibility.

kāraṇaniyamaḥ). And he is not contradicted by showing that the non-eternality which he affirms may be deduced from another ground also.

(Of the two valid *anvayavyatirekin* types of inference which were recognised both by Buddhist and by *Naiyāyika* logic, one is that in which—as western logic would express it—the major premise is not 'simply convertible', i.e. in which all M is P, but not all P's are M. It is to this type that the present rejoinder applies. Uddyotakara's rubric for this type is *sapakṣaikadeśavṛtti*, and the stock example is 'sound is non-eternal because it is the product of volition, like a pot'.)

No. 21 *Rejoinder by 'Unperceived non-perception'* (*anupalabdhisama*) *NS.* V i. 29.

(This rejoinder is directed against the defendant's proof that a thing is not present *because he does not see it*). The rejoinder to this is that "the opposite is possible, seeing that the absence (of his non-perception of the thing) may be argued on the ground that he does not perceive his non-perception". The *sūtra* is involved, but there is no room for doubt as to the nature of the dialectic intended:—

A. I do not see it, so it is not there.

B. But do you perceive your non-perception of it?

A. No.

B. Then (by your own reasoning) your alleged non-perception *does not exist*: in which case the thing may be there after all!

(This will amount to proving that you *see* what you do *not* see. But perhaps it is not quite so absurd as it looks. For failure to perceive may in fact be no proof that the thing was not there. Non-perception must fulfil certain conditions if it is to be a proof of absence).

In an introductory comment to this *sūtra* Vātsyāyana interprets this piece of dialectic as applying to the argument for the non-eternality of sound[1]. "It cannot be said, as the *Mīmāṁsaka* says, that sound existed even before that manifestation of it which the *Naiyāyika* calls the 'production' of it, but that it was not perceived on account of certain obstacles or impediments (*āvarṇa*) which constitute causes of non-apprehension (*agrahaṇakāraṇa*). For (as we *Naiyāyikas* hold) had there been such impediments they would have been perceived. But they are not perceived, and therefore do not exist." And so there is no reason to suppose that sound is not a product but existed even before it was 'manifested'

To this argument the Rejoinder by Unperceived non-perception supplies an answer.—"The non-perception of these concealing agencies is itself not perceived, and from its not being perceived its non-existence follows · and, its non-existence being thus established, your reason for asserting the absence of the concealing agencies disappears: and, from the absence of this reason, the contrary conclusion—existence of obstacles—is confirmed. . . . This reason 'non-perception of obstacles' is *countered by an equal non-perception* (*samayānupalabdhyā pratyavasthitaḥ*)—non-perception not only of the obstacles *but also of the non-perception*. And this is called *anupalabdhisama*."

Reply to No. 21 *NS*. V. i. 30. *and* 31.

"The reasoning is invalid, because non-perception is no more than absence of perception." *Anupalambhātmakatvād anupalabdher ahetuḥ*.

[1]It has in fact been used by an opponent in the section on the impermanence of sound, *NS* II. ii. 19—21, and V. i 30 is identical with II. ii. 31.

By failing to perceive what does not exist, you do not prove its existence! "What exists is the object of perception: and the proposition 'this exists' is based on perception. What does not exist is the object of non-perception, and the corresponding proposition is 'this, not being perceived, does not exist'. Now this non-perception of the non-perception of obstacles, working on its proper object, i e. on a perception which does not exist, does not belie or contradict that object: and its object—non-perception of obstacles—being thus not belied or contradicted is competent to serve as the reason in our argument.—Obstacles, however, because they are existent things, are objects of perception, and there ought to be perception of them. That they are not perceived is due to absence of the perception which would convey the knowledge of the proper object of the perception· and as a result of the non-perception the object proper to the non-perception is conveyed to us, in the form 'there are *no* obstacles which would cause non-apprehension of sound'. So our non-perception is (in fact) established by the very fact that we do not perceive it (the non-perception),—in other words the absence of perception is the proper object of the non-perception of the absence of perception!"

The answer amounts to this. Non-perception is *absence* of perception. Therefore, as an *absence*, it is the appropriate object (not of perception, but) of *non*-perception. I expect to perceive a jar· but I expect *not* to perceive the absence of a jar. So I should expect to perceive a perception,—and therefore *not* to perceive a *non*-perception.—The solution of the difficulty (which is a real one) is obviously not complete: for the consciousness that something is not there is in fact not an *absence* of consciousness,—though it is certainly quite a *different sort* of consciousness from the consciousness that the thing *is* there.

The following *sūtra* completes the solution by recognising that consciousness of not perceiving is after all something more than mere *absence* of perceiving —

NS. V. i. 31. "(And further the reasoning of the Rejoinder is invalid) because there is a feeling within us (*saṁvedanād adhyātmam*) of the presences and absences of the different kinds of cognition". Vātsyāyana explains :—"Within the body of embodied beings the presence and absence of the various kinds of cognition is felt (*saṁvedanīya*). The consciousness 'I have a doubtful cognition' (*saṁśayajñānam*)[1], 'I have no cognition of doubt,' is one among the various classes of cognition produced by perception, inference, testimony, and scripture[2]. And this non-perception of obstacles, etc ,—or absence of perception—is self-felt (*svasaṁvedya*), and we say 'I have no perception of obstacles to sound,' 'obstacles which would cause the non-apprehension of sound are not perceived.' The alleged contingency that 'absence of non-perception is established because we do not perceive the asserted non-perception' cannot arise here (because we *are* conscious of it).

[1]Or a cognition of doubt. In the case of knowledge of our own states the distinction between cognition in the form '*ghaṭo 'yam asti*', and cognition in the form '*ghaṭam ahaṁ jānāmi*' can hardly arise so that it does not matter how we render *saṁśayajñānam*.

[2]*Pratyakṣānumānāgamasmṛtijñāneṣu* *Smṛti* might mean memory here, as Dr Jhā renders it —This is clearly intended for a common sense and not a philosophical list of the sources of knowledge. Otherwise *upamāna* would be included *Smṛti* is not, for the Indian philosopher, a separate source of knowledge, if *smṛti* means memory · though it is so for ordinary thinking.—If *smṛti* means scriptural authority, it was not necessary to mention it again, for it is a mere synonym of *āgama* (Possibly the reading is wrong, and we ought to read—*opamānasmṛti*.—Or else *āgamasmṛti*, 'testimony and scripture' together as a phrase, = *śabda*.—The *Bhāṣaṇīya Naiyāyikas* of later times did not admit *upamāna*. Perhaps this passage reflects an earlier tendency to ignore it.)

The interesting thing in this discussion is the account of self-awareness indicated in *sūtra* 31 and in the *Bhāṣya* thereon. The *Bauddha* view was that a *state of mind* is aware of itself (*svasaṁvedanīya*). The *Mīmāṁsaka* held that *the soul* has awareness (*saṁvit*) of its own states, but not as *objects*: the awareness not being parallel to knowledge, since in knowledge we are cognising objects (*prameya*), while in this 'awareness' we are aware of the states of consciousness as such, i.e. as subjective (*samvittayaiva samvedya*[1]). The classical *Naiyāyika* view disagrees with the *Bauddha*, who holds that it is the *state of mind* that is aware of itself; and agrees with the *Mīmāṁsaka* who maintains that the soul or *self* is the knower. But it differs from the *Mīmāṁsaka* view in making 'inner perception' (*mānasapratyakṣa*) completely parallel with 'outer perception' (*bāhyendriyapratyakṣa*), having for objects the qualities of the soul, and having for sense-organ *manas*. Inner perception is thus only one kind of *sense*-perception, arising as it does from *indriyārthasaṁnikarṣa*, contact of sense-organ and object.

In the present passage this typically *Naiyāyika* view of self-consciousness is ignored, and the phraseology is suggestive rather of the *Bauddha* or the *Mīmāṁsaka* view.—So far as the *sūtra* itself is concerned this is only to be expected; for the *sūtra* nowhere asserts that *manas* is an *indriya* or organ of inner perception, but on the contrary explicitly denies this in at

[1]A phrase from Prabhākara quoted by Dr. Jhā in his *Prābhākara School of Pūrva Mīmāṁsā*. Dr. Jhā however points out that the *Mīmāṁsaka* allows that states of mind are *objects* of inference, though not of perception. We do not perceive them, but we may infer their existence, so that they can become objects of inferential knowledge.

least one passage (III. ii. 56, *aindriyakatvād rūpādīnām apratiṣedhaḥ*), where it is argued that cognition (*buddhi*) cannot belong to the body like physical qualities such as colour, because physical qualities are either perceived by a sense-organ or imperceptible, whereas cognition is perceptible but not by any sense-organ. Vātsyāyana commenting on this says that cognition is not imperceptible, because we are conscious of it (*nāpratyakṣā saṁvedyatvāt*), but that it is not grasped by a sense-organ because it is the object of *manas* (*nendriyagrāhyā manoviṣayatvāt*). This is plain enough: and there are many other passages in which he uses the language of *saṁvitti* and *saṁvedana*[1] and none in which he speaks of *mānasa-pratyakṣa*. The latter doctrine is certainly a *post-Bhāṣya* development: though the germ of it is to be found in the admission into which in one passage[2] Vātsyāyana allows himself to be forced by the apparent logic of facts, that the sister-*śāstra* is right in classing *manas* as an *indriya* and that this implication is to be read into the *Nyāya-sūtra* itself. Diṅnāga forcibly pointed out the corollaries of this admission, with the result that the later *Naiyāyika* school allowed itself to be hampered with the unfortunate 'internal sense' (*mānasa-pratyakṣa*) view of self-awareness. *Manas* in its proper function of the organ of attention is of course concerned in the apprehension of our own mental processes, as it is in every other form of apprehension: and the *Naiyāyika* made a valuable contribution to psychology in his insistence on this. It was very unfortunate that the school should have allowed itself to confuse its doctrine of *manas* by assigning it this other function as an 'inner-sense organ.'

[1] e g. *Bhāṣya* on II. ii. 1-2, III. ii. 31

[2] See *Bhāṣya* on I. i 4, and pages 101-102 *supra*.

[3] Fragment B. See above, footnote 4, page 102.

No. 22 *Rejoinder by parity of non-eternality (anityasama). NS.* V. i. 32.

Since from a likeness community of property follows, the consequence will be that all things (and not merely sound) are non-eternal, because all things resemble the pot, which is non-eternal.

This is, as Uddyotakara points out, merely a special application of *aviśeṣasama*, *No.* 18; which is a dialectical device for showing that everything can be proved of anything, so that in effect no *specific* proof exists.

Reply to No 22 *NS*. V. i. 33-34

The opponent does not prove the contradictory of the defendant's position: because (on his own showing) resemblance invalidates proof, and his own proof (in respect of being the normal five-membered syllogism) *resembles* the defendant's argument, which is asserted to be invalid[1]!

Sūtra 34.

Further, because the 'reason' is a quality known in the example to stand in the relation of a *probans* to a *probandum* (*sādhyasādhanabhāvena prajñātasya dharmasya hetutvāt*), and because it is found in both ways (*ubhayathābhāvāt*), it is not true that our middle term fails to distinguish or is not specific (*aviśesaḥ*)."

There are two things of interest here in connection with the logic of the early school. (1) A valid *hetu* is a *viśeṣahetu*. If a middle term fails to be 'distinctive', it is *aviśeṣa*. Later on, the conclusion was reached that the *distinctiveness* of the valid middle consisted in exclusion from non-P: so that one of the

[1]Reading with the Benares 1920 edn. *sādharmyād asiddheḥ pratiṣedhāsiddhiḥ pratiṣedhyasādharmyāc ca.*

The Viz., text read *pratiṣedhyasiddhiḥ*. It notes the omission of *ca* as an MS variant.

Bauddha logicians (either Vasubandhu or Diṅnāga) offers as a definition of a valid middle term the phrase *vipakṣād viśeṣaḥ*, "that which excludes from non-P." Now the dialectical device of *aviśeṣasama*—No. 18, which is identical in principle with the present *jāti*,— consists in attempting to argue that the very principle of inference is such that there is *always* exclusion from non-P,—so that we can infer always that *everything* is P (*nothing* is non-P, *everything* is excluded from non-P). But when a *differentia* applies to everything, of course it ceases to be a *differentia*. The dialectic therefore amounts to saying that there is no such thing as a *viśeṣahetu*. (2) Now in refuting this dialectical attack on inference the *sūtrakāra* is compelled to ask himself what constitutes the 'distinctiveness' of a *hetu*: and I think that in the phrase *ubhayathā bhāvāt* he does in fact foreshadow the analysis of the 'canons of syllogism' embodied later in the *trairūpya*. The 'distinctiveness' of a middle term, according to the *trairūpya*, consists in the fact it is (*a*) found with P—*sapakṣe sattvam*, and (*b*) not found with non-P— *asattvaṁ vipakse*. It must be this double relation of the middle that is meant, though not precisely formulated, in the phrase 'existing in both ways'— i e. as resident in P and as excluded from non-P. Vātsyāyana interprets the phrase by *kenacit samānaḥ kutaścid viśiṣṭaḥ*—the middle term is "common to some things and excluded from others." This is a plain foreshadowing of the two 'canons' of the *trairūpya* referred to above; and there seems to be no doubt that Vātsyāyana is correctly interpreting the meaning of the phrase in the *sūtra*. He adds in further explanation that "it is a *resemblance* as a result of this common-ness, and a *difference* as a result of distinction"—*sāmānyāt sādharmyaṁ, viśeṣāc ca vaidharmyam*.

We may therefore claim that this passage is the germ of the later syllogistic canons: and it may be that the developed art of syllogistic in India had its origin in the sort of attempt to find answers to sophistical attacks on reasoning which is embodied in the fifth chapter of the *Nyāyasūtra*. The *sophistici elenchi* came early in the order of development of logical conceptions. Out of this the syllogistic technic arose, and, having arisen, superseded the older treatment of the *sophistici elenchi*, which then became rather a historical survival than an essential part of logical discipline.

If this account is correct it will be a mistake to regard the fifth book of the *Nyāyasūtra* as a sort of serious trifling belonging to a rather later period than the rest of the *sūtra*. It must rather be regarded as an integral part of the first earnest attempt to distinguish good from bad reasoning, and to defend the validity of inference.

SECTION 3. THE SIX STEPS IN *TU QUOQUE* DIALECTIC (*ṢAṬPAKṢĪ*)

The concluding section of the first *āhnika* of the fifth *adhyāya* of the *Nyāya Sūtra* (*NS*. V. i. 39—43) points out 'for the instruction of the pupil' that a merely dialectical rejoinder to a thesis is always open to a dialectical re-rejoinder or '*tu quoque*,' and this again to another *tu quoque*. Thus far there are four stages in the *Saṭpakṣī*,—thesis, dialectical rejoinder, *tu quoque*, and retorted *tu quoque*. The fifth step consists in the defendant's pointing out that the opponent's *tu quoque* (the fourth step) involves the admission that his own dialectical rejoinder (second step) is no better than the defendant's *tu quoque* (third step): which amounts to admitting that his

original denial of the thesis is invalid, and therefore to an admission of the validity of the thesis itself (*matānujñā*). The final or sixth step consists in the opponent's retorting with another *tu quoque* fastening the charge of *matānujñā* on the defendant's *tu quoque* (third step). Thus :—

1. Thesis (*pakṣa*) :

Defendant. Sound is non-eternal, because it follows after volition.

2. Rejoinder (*pratiṣedha*) :

Opponent. It is not true that sound is non-eternal; for following after effort may as well mean the *manifestation* of a permanent thing as the *production* of something that comes into being and perishes.

3. Re-rejoinder (*vipratiṣedha*) :

Defendant.
NS. V i 39 Your rejoinder is open to the same retort,—for following after effort may as well mean *production* as *manifestation*. Therefore you cannot say that *it is not true* that sound is non-eternal. Therefore, since you have not disproved my thesis, it stands!

NS. V i. 40. (The defendant at this point ought to have met the opponent by showing that his own thesis was based on a *viśeṣahetu*. Instead of that he contents himself with saying that the absence of a *viśeṣahetu* is common to both parties, to the opponent as well as to himself. The next *sūtra*—*NS.* V. i. 40, *sarvatraivam*, means that it is always possible for a defendant to give this sort of dialectical reply to any sort of dialectical rejoinder. But in doing so he will commit himself to the barren treadmill of the *ṣaṭpakṣī*, which will then proceed as follows) :—

4. Retort to the re-rejoinder.

Opponent. *NS.* V. i. 41. Your re-rejoinder (*pratiṣedhavipratiṣedha*, i.e. the third step) itself commits the same fault which it urges against my rejoinder[1] (i.e. the second step)—the fault of inconclusiveness (*anaikāntikatva*)[2]. That is it no more disproves my rejoinder, than (as you assert) my rejoinder disproves your thesis. Therefore, as your re-rejoinder does not contradict my rejoinder, my rejoinder stands!

5. Rejoinder to 4.

Defendant. *NS.* V. i. 42. When you say that my rejoinder No. 3 commits the same fault of inconclusiveness as your own first rejoinder No. 2, you admit that your rejoinder was invalid without making any attempt to remove its invalidity: and this amounts to the *futility* (*nigrahasthāna*) called *matānujñā*, i.e. admission of your opponent's position

6. Retort to 5.

Opponent. *NS.* V. i. 43. In the same way you yourself in your re-rejoinder No. 3 said that my rejoinder No. 2 committed the same fault of inconclusiveness as your own original thesis No. 1,—and you thereby admitted that your thesis was faulty: which amounts to *admitting my contention* that your thesis was faulty. *Tu quoque*, therefore! i.e. you too are guilty of the *futility* called *matānujñā*.

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[1]The *Nyāyasūtravṛtti* reads this *sūtra* (V. i. 41)

Pratiṣedhavipratiṣedhe pratiṣedhado ṣavad doṣāh.

The Vizianagram edn. also reads this. But the 1920 edition reads the *sūtra* differently in connection with the *Bhāṣya*, though in connection with the *Vṛtti* it gives it in the above form. As connected with the *Bhāṣya* the *sūtra* is given as :—

Pratiṣedhe vipratiṣedho pratiṣedhadoṣavad doṣāḥ.

This must be a mere error, for on p. 509 l. 19, when the *sūtra* is cited in the *Bhāṣya*, it is read in the other form.

[2]So the *Bhāṣya*.

Herewith the logic of the *tu quoque* comes to a natural stop, though not to a conclusion. The *ṣaṭpakṣī* is not mere trifling. It points the logical moral of the attempt to answer dialectic with the *argumentum ad hominem* · and it is noteworthy that the last word is left with the opponent. It forms an appropriate conclusion to Gautama's *Sophistici Elenchi*.

Vātsyāyana points this moral quite clearly at the end of his comment on V. i. 43 "When does the *ṣaṭpakṣī* arise? when the discussion proceeds on the lines of 'there is the same fault in the rejoinder itself', then neither alternative is established (and then the *ṣaṭpakṣī* occurs). But when the third step is on the lines of the reply given in *sūtra* 38 to the *kāryasama jāti*,—' if sound were not a real effect but only a manifestation, volition could not be the cause of sound: for in cases where the so-called effect is a mere manifestation, there are to be found causes of the non-perception of the manifestation before it is manifested',—then it is a *viśeṣahetu*, a demonstration, that is given by the defendant in answer to the rejoinder of the opponent, and he *proves* his thesis that there is a *coming into being* of sound after volition, and not a mere *manifestation*: and so there is no room for the *ṣaṭpakṣī*."

The most significant result which emerges from this examination of the *ṣaṭpakṣī* is therefore the insistence upon the necessity of a *viśeṣahetu*, a reason which is peculiar to the *probandum* (P) and excludes the opponent's alternative (non-P). The *Naiyāyika's viśeṣahetu* corresponds[1] in fact to the Aristotelian *apodeixis*. It is demonstration.

[1] I do not mean that it is identical with, or even closely resembles, the Aristotelian conception of what demonstration means.

SECTION 4. DEFEAT IN DEBATE

Set debates appear to have been a feature of the ancient schools, and Vasubandhu is reported to have written three works on the principles, the expedients, and the method of debate[1]. The closing section of the *Nyāya Sūtra* is devoted to an enumeration of the circumstances in which one of disputants in such a debate is to be regarded as defeated: the twenty-two *nigrahasthāna's* being the different conditions under which a disputant may fairly be considered to have 'taken the count'[2]. The whole conception is of course rhetorical or eristical rather than logical; and some of the 'points of defeat' are conventional.

A disputant is considered to be defeated:—

Inconsistency. A. If he abandons, alters, gives a reason contradictory of, or denies, his own thesis; and if he shifts his ground for the conclusion (1—5).

Irrelevance and obscurity. B If he talks irrelevantly, or uses words which have no recognised meaning, or is quite obscure, or

[1]Professional men debated as well as philosophers. Caraka in his work on Medicine has a section on debate in which he points out under what circumstances it is advisable to enter the lists, and what expedients are to be employed. No doubt Vasubandhu's lost *Vādavidhi*, *Vādakauśalya*, and *Vādamārga* corresponded in contents with this section of the *Caraka Saṁhitā*

[2]The seven heads under which the 22 *nigrahasthānas* are here grouped are Vācaspati Miśra's arrangement

The Sanskrit names are —

1. *pratijñāhāni*
2. *pratijñāntara*
3. *pratijñāvirodha*
4. *pratijñāsaṁnyāsa*
5. *hetvantara*
6. *arthāntara*
7. *nirarthaka*
8. *avijñātārtha*
9. *apārthaka*
10. *aprāptakāla*
11. *nyūna*
12. *adhika*
13 (*a*) *punarukta*
   (*b*) *punarvacana*
14. *ananubhāṣaṇa*
15. *ajñāna*
16. *apratibhā*
17 *vikṣepa*
18 *matānujñā*
19. *paryanuyojyopekṣaṇa*
20. *niranuyojyānuyoga*
21. *apasiddhānta*
22. *hetvābhāsa*

uses collections of words which convey no meaning as a whole (6—9).

Want of method. C. If his syllogism is not stated in the proper order, or has not the full complement of premises or adds a superfluous reason (10—12).

Tautology. D. If he is guilty of any form of tautology (repeating the same word, or saying the same thing in other words; or saying separately what is already implied in his statement) (13a and b.)

Want of understanding. E. If he cannot repeat, or cannot understand, what his opponent has said, or can find nothing to say in reply, or makes obvious excuse for breaking off the debate (14—17).

F. If his reply to the opponent's thesis admits the equal invalidity of his own thesis, if he fails to point out a clincher to which the opponent has exposed himself, or alleges one to which the opponent has not exposed himself (18—20).

G. If he abandons the principles of the system which he is supposed to be defending; and if he uses a fallacious middle term (21 and 22).

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Nyāyakośa by Bhīmācārya Jhalkīkar, Bombay Sanskrit Series, 1st edn. 1878, 2nd edn. (very much enlarged) 1893 This is a modern cyclopædia of *Nyāya* technical terms with commentators' definitions (in Sanskrit), [3rd edn., 1928]

Nyāyapradīpa commentary by Viśvakarman on the *Tarkabhāṣā*, with which it is edited

Nyāyapraveśa Buddhist logical treatise attributed to Diṅnāga by Vidyābhūṣaṇa (who gives a detailed account of the Tibetan version in his *MSIL* and *HIL*), but to Śaṁkara Svāmin (Diṅnāga's pupil) by Sugiura and Ui. It was before known in the Tibetan and Chinese translations; but recently the Sanskrit original has been discovered in India, and is now being edited by A. B Dhruva in the Gaekwad's Oriental Series. See Tucci G., *infra*

Nyāyaratnākara of Pārthasārathi Miśra, a commentary on the *Ślokavārtika*, with which it is edited Chowkhamba Sanskrit Series, *Benares*, 1898.

Nyāyasāra of Bhāsarvajña, ed. S C Vidyābhūṣaṇa, Bibl. Ind., *Calcutta*, 1910 · V P. Vaidya, *Bombay*, 1910

Nyāyasiddhāntamuktāvalī. See *Bhāṣāpariccheda*.

Nyāyasūcīnibandha of Vācaspati Miśra, printed as an appendix to the 1907 edition of the *Nyāyavārtika*, and as preface to the 1920 edition of the *Nyāyabhāṣya*. (It is the author's *sūtrapāṭha*, i.e. the reading of the *sūtras* as fixed by him, with division into sections or topics.)

Nyāyasūtra, edited with the editions of the *Nyāyabhāṣya*, *-vartika* and *-vṛtti*. Translated in Gaṅgānātha Jhā's translation of these works. Edited and translated by S. C. Vidyābhūṣaṇa—*The Nyāyasūtra of Gotama*, Sacred Books of the Hindus, *Allahabad*, 1911—13. *Die Nyāyasūtras*, W. Ruben, *D. M. G. Abh* xviii, 2, *Leipzig*, 1928. A critical text with German translation and valuable notes.

Nyāyasūtravṛtti of Viśvanātha Nyāyapañcānana Bhaṭṭa—
(1) *Calcutta*, 1828. *Editio princeps* of the *Nyāya sūtra*.
(2) With the Benares 1920 edn of the *Nyāyabhāṣya*.
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Nyāyavārtika of Uddyotakara (Bhāradvāja)—
(1) ed. Vindhyeśvari Prasāda Dvivedin (Dube), Bibl. Ind., *Calcutta*, 1907.
(2) ed. Vindhyeśvari Prasāda Dube and Lakṣmaṇa Śāstrī Drāviḍa, Chowkhamba Sanskrit Series, Benares, 1915. Translated by Gaṅgānātha Jhā in *Indian Thought*, 1910—1920

Nyāyavārtikatātparyaṭīkā (briefly, *Tātparyaṭīkā*) of Vācaspati Miśra—
(1) ed Gaṅgādhara Śāstrī Tailanga, Vizianagram Sanskrit Series, *Benares*, 1898.
(2) ed Srirājeśvara Śāstrī Drāviḍa, Benares Sanskrit Series, 1925

Nyāyavārtikatātparyapariśuddhi (briefly, *Pariśuddhi*) of Udayana. Edited up to the end of *Sūtra* I i 4 only in the Bibl Ind, but publication suspended, 1911. So far as I know there is no printed text of the remainder of the work

Nyāyāvatāra of Siddhasena Divākara (a *Jaina work*) Edited and translated by S. C. Vidyābhūṣaṇa for the Indian Research Society, *Calcutta*, 1909.

Padārthadharmasaṁgraha. See *Praśastapādabhāṣya*

Pandit. *The* The journal of the Government Sanskrit College, *Benares*. From 1866—1915 (Devoted to the editing of Sanskrit works Some of these were subsequently published as Reprints.)

Pārthasārathi Miśra, author of *Nyāyaratnākara* and *Śāstradīpikā*, qq v.

Patañjali. See *Yogasūtra*.

Pāthak K. B. *Bhartṛhari and Kumārila*, in the Journal of the Bombay Branch of the Royal Asiatic Society, xviii, 1892, pp (This is a valuable contribution towards settling the relative chronology of philosophical authors.)

Péri, Noel *A propos de la date de Vasubandhu*, in Bullétin de l'Ecole Francaise de l'Extrême-Orient, xi, 1911, pp 339 ff.

Poussin, L. de la Vallée *Le Bouddhisme d'après les sources brahmaniques*. In *le Muséon*, n. s ii, 1901.
(A translation of the chapter on the *Bauddha* system in the *Sarvadarśanasaṁgraha*, with notes of great value) See also *Madhyamika Sūtra*.

Prābhākara School of Pūrva Mīmāṁsā, by Gaṅgānātha Jhā, in *Indian Thought*. (The author has examined the *MS*. of Prabhākara's *Bṛhatī* which is in the possession of the Bengal Asiatic Society. So far as I know there is no other known *MS*. of this important work; nor has it ever been published. This article contains the only available first-hand statements about Prabhākara.)

Pramāṇa-samuccaya of Diṅnāga. Not extant in Sanskrit Vidyābhūṣaṇa gives (rather different) accounts of its contents as found in the Tibetan version, in his *MSIL* and *HIL*. The *Pramāṇasamuccaya* is freely cited by Vācaspati Miśra in the *Tātparyaṭīkā* I have collected and attempted to interpret these and other fragments of Buddhist logic in my *Fragments from Diṅnāga*. See also Tucci *On the Fragments from Diṅnāga*, *J. R. A. S.*, April, 1928 Professor Tucci states that Mr. A. Iyengar is working on the edition and restoration into Sanskrit of the *Pramāṇa-samuccaya*.

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(1) With the *Nyāyakandalī* of Śrīdhara Miśra. Edited by Vindhyeśvari Prasāda Dvivedin (Dūbe), Vizianagram Sanskrit Series, *Benares*, 1895.

(2) With Udayana's *Lakṣaṇāvalī* and part of his *Kiraṇāvalī*, by the same editor, *Benares*, 1885—1897.

(3) With *Kiraṇāvalī* and *Kiraṇāvalī-bhāskara* of Padmanābha Miśra. Edited by Gopīnātha Kavirāja, Princess of Wales' Sarasvatī Bhavana Texts, No. I, *Benares*, 1920

Translation of (1) above, by Gaṅgānātha Jhā in the *Pandit*, xxv, 1904 ff See also Faddegon, Ui

Randle, H. N. (1) A *Note on the Indian Syllogism*, in *MIND*, xxxiii, 1924, pp 398—414.

(2) *Fragments from Diṅnāga*. Royal Asiatic Society, *London*, 1926 [Supplemented by Tucci in *J. R A. S*, April 1928, pp. 377—390.]

Ruben, W. See *Nyāya-sūtra*

Śabara's *Bhāṣya* with *Mīmāṁsā Sūtra*, ed Maheśa Candra Nyāyaratna, Bibl Ind, *Calcutta*, 1889

Sadho Lal Lectures on Nyāya, by Gaṅgānātha Jhā in *Indian Thought*.

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(2) *The Sānkhya Kārikā*, translated by H. T. Colebrooke. *The Bhāshya*, translated by H H Wilson, *London*, 1837.

(3) Translated by John Davies, Trübner's Oriental Series, 1881, under the title *Hindu Philosophy*.

(4) Translated by Nand Lal Sinha, Sacred Books of the Hindus, *Allahabad*, 1915.

(This is the oldest extant *Sāṁkhya* treatise, the *Sūtra* being a late compilation.)

Sāṁkhyapravacanabhāṣya of Vijñāna Bhikṣu A commentary on the *Sāṁkhya-sūtra*—

(1) Fitzedward Hall, Bibl. Ind., *Calcutta*, 1856

(2) Edited by R. Garbe in the Harvard Oriental Series, vol II, 1895.

(3) Translated by Nand Lal Sinha, Sacred Books of the Hindus *Allahabad*, 1915.

Sāṁkhya Sūtra, edited with the preceding work

Sāṁkhyatattvakaumudī of Vācaspati Miśra. A commentary on the *Sāṁkhya-kārikā*—

(1) Translated by R. Garbe, *Munich*, 1891.

(2) Edited and translated by Gaṅgānātha Jhā, *Bombay*, 1896.

Sarvadarśanasaṁgraha of Mādhava (Mādhavācārya). There have been many editions since the Bibliotheca Indica edition by Īśvaracandra Vidyāsāgara, 1858. A recent one is by Vāsudeva Śāstrī Abhyankara, Government Oriental Series, *Poona*, 1924. Translated by E. B. Cowell and A. E. Gough in the *Pandit*, 1874—78. This translation was republished in Trübner's Oriental Series, 1882 [2nd edn., 1894]. See also Poussin.

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Śāstri, Hara Prasād. See *Six Buddhist Nyāya Tracts.*

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Ślokavārtika of Kumārila Bhaṭṭa on the *tarkapāda* or logical section of Śabara's *Bhāṣya*. Edited with the *Nyāyaratnākara* of Pārthasārathi Miśra, by Rāma Śāstrī Tailaṅga Chowkhamba Sanskrit Series, *Benares*, 1898-1899. Translated by Gaṅgānātha Jhā, Bibl. Ind., *Calcutta*, 1900—1908.

Smith, Vincent A. *The Early History of India*. Oxford University Press, 4th edn , 1924.

Śrīdhara Miśra See *Nyāyakandalī*.

Stcherbatsky Th (1) *Rapports entre la théorie bouddhique de la connaissance et l'enseignement des autres écoles philosophiques de l'Inde.* In *le Muséon*, n. s. v, 1904.

(2) *Epistemology and Logic of the Later Buddhist Schools* (in Russian), *St. Petersburg*, 1909.

(A communication from Stcherbatsky in English, summarising some of the views expressed here, is given in Jacobi's article *On the Dates of the Philosophical Sūtras J A.O.S.*, xxxi, 1911.

(3) An Appendix contributed to Strauss' German translation of the above work, 1924 (p. 259), is his latest statement of views. He here definitely renounces the view as to the relation of Diṅnāga to Praśastapāda expressed in (1) and (2)

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(2) *Erkenntnistheorie u Logik nach der Lehre der späteren Buddhisten, von Th. Stcherbatsy, aus dem Russischen übersetzt von Otto Strauss. München-Neubiberg*, 1924.

(3) *Des Viśvanātha Pañcānana Bhaṭṭācārya Kārikāvalī mit des Verfassers einigem Kommentar Siddāntamuktāvalī. Leipzig*, 1922. (A translation.)

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Subandhu. See *Vāsavadattā*.

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by Ambikācaraṇa Banerji, *Calcutta*, 1885; and by Kaviraj Kunjlal Bhishagratna, *Calcutta*, 1907—1916.

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(This is a far better introduction to the *Nyāya* than the better-known *Tarkasaṁgraha* It is very lucid, follows the strict *Naiyāyika* arrangement, does not burden itself with *Vaiśeṣika* physics, and is free from the subtleties of the "modern" school)

Tarkakaumudī of Laugākṣi Bhāskara Edited with English notes by Manilal Nabhubhai Dvivedin, Bombay Sanskrit Series, 1886. (This is a slight work, but has some bibliographical importance owing to the editor's notes, which gave a useful account of the elements of the *Nyāya*)

Tarkasaṁgraha of Annam Bhaṭṭa Edited with a historical introduction and English notes by Bodas and Athalye, Bombay Sanskrit Series, 1st edn , 1897, 2nd edn., 1918 (The work itself is syncretist *Nyāya-Vaiśeṣika*, and it is unfortunate that European scholars have derived their accounts of the *Nyāya* largely from this popular modern manual. But the editors' introduction is of bibliographical importance, and their notes valuable)

Tarkavāgīśa, Phaṇibhūṣaṇa. This scholar is publishing an edition and translation (into Bengali) of the older *Nyāya* under the title *Nyāyadarśana*, *Calcutta*, 1917,
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Udayana (Udayanācārya), author of—
(1) *Nyāyavārtikatātparyapariśuddhi*, q. v
(2) *Kusumāñjali*, q. v.
(3) *Lakṣaṇāvalī*. See *Praśastapādabhāṣya*.
(4) *Kiraṇāvalī*. See *Praśastapādabhāṣya*.
(5) *Ātmatattvaviveka* or *Bauddha-dhikkāra*, *Calcutta*, 1849, 1901.

Uddyotakara, author of *Nyāyavārtika*, q. v.

Ui, H. *Vaiśeṣika Philosophy according to the Daśapadārthaśāstra*. Royal Asiatic Society, London, 1918.

(An account of the *Vaiśeṣika* from Chinese sources. Gives valuable chronological indications and information about Buddhist logic.)

Upaskāra. See *Vaiśeṣikasūtropaskāra*.

Vācaspati Miśra, author of—
(1) *Nyāyavārtikatātparyaṭīkā*, q. v.
(2) *Sāṁkhyatattvakaumudī*, q. v
(3) *Tattvavaiśāradī*, Bombay Sanskrit Series, 1892. See Woods.
(4) *Bhāmatī*, Bibl. Ind., 1880
(5) *Nyāyakaṇikā*, in the *Pandit*, xxv—xxviii, 1903—1906 (Reprint, *Benares*, 1907) (with the *Vidhiviveka*).
(6) *Tattvasamīkṣā* (never edited?)
(7) *Tattvabindu*, *Benares*, 1892.
(8) *Nyāyasūcinibandha*, q. v.

Vaiśeṣika-bhāṣya. See *Praśastapāda-bhāṣya*.

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Vaiśeṣikasutropaskāra (briefly, the *Upaskāra*) of Śaṁkara Miśra Edited in Bibl. Ind., 1861; also by Jīvānanda Vidyāsāgara, *Calcutta*, 1886

The *sūtras*, with extracts from the *Upaskāra* and from a modern commentary, are edited and translated by A. E Gough, *Benares*, 1873; and by Nand Lal Sinha, Sacred Books of the Hindus, *Allahabad*, 1911.

Varadarāja, author of *Tārkikarakṣā*, q. v.

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Vātsyāyana or Pakṣilasvāmin, author of *Nyāyabhāṣya*, q v

Vedānta Sūtra with *Śārīrakabhāṣya*, by Śaṁkara Ācārya. Translated by G Thibaut in *Sacred Books of the East*, xxxiv, xxxviii *Oxford*, 1890, 1896

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(2) *Vedāntasiddhāntamuktāvalī*, *Benares*, 1898 (He delivered lectures on the *Nyāya* in Allahabad University which were privately printed)

Vidyābhūṣaṇa, Satīś Candra—
(1) *Indian Logic Mediæval School*, Calcutta University, 1909 [A detailed account of Buddhist and Jaina logic. It is embodied in a revised form in (2), which supersedes it.]
(2) *History of Indian Logic, Ancient Mediæval and Modern School*. Calcutta University, 1922.
(An invaluable mine of information See notice in *J.R.A.S.*, April, 1925, pp. 345—348, and in *Mind*, January, 1926.)
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(2) Translated by Rāma Prasāda, Sacred Books of the Hindus, *Allahabad*, 1910.

(3) See woods

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